

66
ISSUED EVERY WEDNESDAY



DRUG & CHEMICAL MARKETS

Established 1914

A Weekly Business Paper for Those Who Make, Sell, or Buy
Chemicals, Dyestuffs, Drugs, Essential and Fatty Oils

VOLUME X.

NEW YORK, MARCH 29, 1922

No. 13



Acetphenetidin, U. S. P.
(PHENACETIN)

Acetyl Salicylic Acid
(ASPIRIN)

Standard Monsanto medicinals are now in demand by the consuming trade. Stocks of Acetphenetidin and Acetyl Salicylic Acid, as well as Sodium Salicylate, Glycerophosphates and other Monsanto medicinals are carried at New York, Chicago and St. Louis.

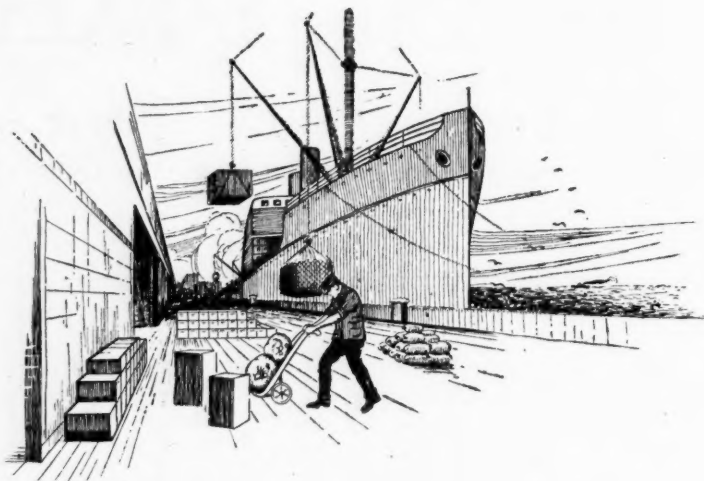
Monsanto Chemical Works

St. Louis, U. S. A.

New York

Chicago

Published Wednesdays by Drug & Chemical Markets, Inc., 3 Park Place, New York. Subscription \$4.00 a Year; Foreign \$5.00. Entered as second-class matter December 7, 1914; at New York Post Office.



The Mark of Approval

A definite system of selective control prevails at the source of all our imported materials.

Likewise, the degree of care exercised in manufacturing processes strikes a *high quality level*.

Presenting for consideration but *another phase* of a policy which has earned the endorsement of those whose interests we seek to serve.

STEIN, HALL & COMPANY

INCORPORATED

MANUFACTURERS AND DIRECT IMPORTERS

61 BROADWAY

EXECUTIVE OFFICES

NEW YORK

STARCHES—DEXTRINES—GUMS—OXALIC ACID

DUPONT

VAT

ACID

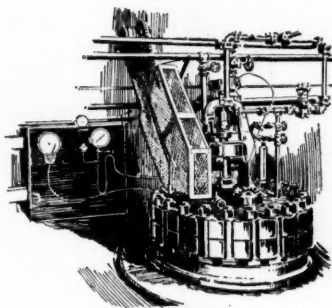
CHROME

BASIC

SULFUR

DIRECT

DYESTUFFS



One of a battery of high-pressure fusion-kettles in which certain carefully controlled reactions are effected.

Constant Vigilance

IN order to insure the production of standard uniform dyestuffs, every step in their manufacture must be under constant observation.

Pressure, temperature, speed of agitation as well as duration of reaction are vital factors which, if not kept under absolute control during dyestuffs manufacture, destroy every desirable quality.

The excellence of Du Pont plant control is reflected in the *uniformity* of the product. You get *uniform* results from *uniform* Du Pont Dyestuffs.

E. I. DU PONT DE NEMOURS & CO., INC.

Dyestuffs Department
WILMINGTON, DELAWARE

BRANCH OFFICES:

New York Boston Providence
Philadelphia Chicago
Charleston, S. Car.

Calco

Specify Calco

when you are ordering dyestuffs and intermediates. The name assures quality, uniformity and certainty of delivery.

A Calco product is never offered until it is being manufactured in such great quantities that we are sure it is of the highest grade and that each barrel is identical with the standard.

The force of the entire organization is unceasingly directed toward this one end.

THE CALCO CHEMICAL COMPANY
Bound Brook N.J.
New York Boston Philadelphia Chicago

ISSUED EVERY WEDNESDAY

DRUG & CHEMICAL MARKETS

PUBLISHED EVERY WEDNESDAY BY

DRUG & CHEMICAL MARKETS, INC.

WILLIAMS HAYNES, President

IRA P. MACNAIR, Secretary F. F. BURGIN, Treasurer

Publication Office

3 PARK PLACE, NEW YORK, U. S. A.

Telephone 0440 Barclay

Cable Chemmarket

Home Life Bldg., Washington, D. C.

80 Fenchurch st., London, E. C. 3.

19 Rue Auber, Paris

40 Gr-Burstah, Hamburg

18 Yamashita-cho Kyobashi-Ku, Tokyo

Entered as second-class matter, Dec. 7, 1914, at the post office at New York, N. Y., under the Act of March 3, 1879.

SUBSCRIPTION RATES

United States, Cuba and Mexico \$4.00 a year; Foreign \$5.00 a year, payable in advance. Current Copies, 10 cents. Back Copies, 25 cents. A Binder for this Journal @ \$1.00 Postpaid.

Table of Contents

EDITORIALS—

Straws	727
When is a Fine Chemical Fine?	727
Coal Enough for the Present	727
German Propaganda	728
Lower Selling Costs	728

FEATURE TRADE ARTICLES—

Senate Finance Committee Receives Report of Sub-Committee, Recommending Higher Duties on Intermediates and Finished Coal-Tar Products. Other Schedules Discussed	729
German Dyes Needed in United States, Says Herman A. Metz, Testifying Before the Senate Committee Investigating the Dyestuff Situation	730
A Brief for Higher Arsenic. The Possibilities of a World-Wide Famine Critically Considered by Howard A. Ambruster	731

TRADE NEWS—

January Exports of Soda Compounds	735
Chemists Gathering at Birmingham	737
Sources of Tanning Materials	739
New Narcotic Form Discussed	743
Lemon Oil More Active in Italy	745
Senate Committee's Textile Tariff Rates Higher Than in Fordney Bill	746
Dr. Duisberg Says Only One German Dye Has Been Successfully Duplicated by Manufacturers of Colors in "Enemy" Countries...	749

MARKET REPORTS—

Heavy Chemicals	734-735
Fine Chemicals	736-737
Intermediates and Dyes	738-739
The Oil Market	740-741
Crude Drugs	742-743
Essentials Oils	744-745
The Consuming Industries	746-747
Foreign Market	748-749

PRICES CURRENT	750
IMPORTS	769
WANTS AND OFFERS	771
BUYERS' GUIDE	773
INDEX TO ADVERTISERS	774



Acids

SULPHURIC
HYDROCHLORIC
NITRIC
MIXED ACID

Commercial and Chemically Pure
Grades—In All Strengths

Salts

SULPHATE ALUMINA
(For Paper Makers and Water Works)
AMMONIA ALUM U. S. P.
TRISODIUM PHOSPHATE
HYPOSULPHITE SODA
FLUORIDE SODA
BISULPHITE SODA
Anhyd. Powder and Liquid
TIN CRYSTALS
EPSOM SALTS
U. S. P. and Technical
GLAUBER'S SALT

General Chemical Company

25 Broad Street, New York

Baltimore
Buffalo
Chicago

Cleveland
Denver
Easton

Montreal
Philadelphia
Pittsburgh

Providence
San Francisco

Cable Address: LYCURGUS, NEW YORK



RADICAL PRICE REDUCTIONS

CRESOL, U. S. P.

(Specially processed insuring light color)

REFINED CRESYLIC ACID No. 5

CRUDE CRESYLIC ACID 97-99% Straw Color

(Regular and decolorized)

CRUDE CRESYLIC ACID 95% DARK

TAR ACID OILS

(All strengths)

DIP OIL

These acids, each manufactured to conform to the rigid Barrett Standard Specifications, are now being offered at the lowest prices which we have quoted in 10 years.

Whether requirements be large or small, we are prepared to make prompt shipment in standard packages.

Write for Quotations

The *Barrett* Company

40 Rector Street



New York, N. Y.

ISSUED EVERY WEDNESDAY

DRUG & CHEMICAL MARKETS

3 PARK PLACE, NEW YORK

VOLUME X, NUMBER 13

[MARCH 29, 1922]

STRAWS

Prophecy always involves an element of risk, yet it is impossible to make even the most casual survey of the chemical markets at the present time without becoming comfortably optimistic regarding the trend of the times. Since the beginning of the year the tendency of the market to develop shortages has become more and more pronounced. The falling market of the past two years discouraged the accumulation of stocks to such an extent that every buying order of any size which has come in recently has forced firmer prices immediately. This has not been pronounced with those materials which have remained in the control of American manufacturers, where increased supplies have been readily obtained by expanding plant operations, but it has been especially noticeable in connection with those items which have passed from the control of makers to that of importers, and which have not been extensively stocked here.

The advance of red prussiate of potash from an easy price of 29c at the first of the year to a high point of 79c recently when supplies practically vanished; the shortage of barium chloride which drove the price from \$50 per ton to \$80 per ton within three weeks; the firmness of ammonium sulfate which forced an advance from slack price of \$2.60, f.a.s., to a very firm price of \$3.25 in less than a month; the advance on nitrate of soda from \$2.35 to \$2.85 in two weeks; and the stiffening of spot sodium nitrite from 6½c to 9½c in six weeks; each of these is an instance of the effect of recent buying in this market. Contributing causes have been different in each case, but certainly the universal primary cause was the receipt of buying orders in a market bare, or nearly so, of supplies to fill them. Instance is piling upon instance of the spread of this condition throughout the market. No straw could point more clearly the direction of the wind. Buyers are entering the market. Confidence is slowly but surely returning, and lack of confidence more than anything else has been the key to the long months of pessimism through which we have been passing.

WHEN IS A FINE CHEMICAL FINE?

The extreme looseness with which a trade, especially the chemical trade, is accustomed to apply the terms classifying its products has come into serious question during the last few months following the efforts of various governments to protect their own industries from cut-throat foreign competition. So far as can be determined there has never been a hard and fast rule classifying chemicals as "fine" and heavy," and it is ex-

tremely doubtful if there ever will be. Yet the importance of this question in the administration of the import licensing systems of Great Britain seems paramount. E. J. Parry, a prominent chemical manufacturer of Great Britain, recently gave the British Board of Trade four criteria for the decision of the question of the identity of a "fine chemical."

According to his statement, a fine chemical (1) is made in comparatively small batches, (2) is handled in comparatively small lots, (3) requires great skill in its preparation, and (4) is used largely for pharmaceutical purposes. To each of these there are exceptions, and quite probably there are as many exceptional compounds as there are that follow the classification throughout. The definite, absolute classification of a compound in one group or the other is modified by so many circumstances that it will probably be impossible ever to reach a final decision on a chemical list. Many compounds fall into one or the other class quite naturally but others refuse to be placed definitely either way. It must be remembered that the common trade classifications are made merely for convenience and do not necessarily have absolute scientific foundations.

COAL ENOUGH FOR THE PRESENT

Operators and miners in the soft coal districts in Pennsylvania, Ohio, Indiana, and Illinois, were unable to reach an agreement, owing to indictments pending in the Federal courts for making contracts on wage scales covering districts in different states—a violation of the Sherman law because the business is interstate. The miners refused to meet the operators in separate districts, in spite of the fact that conditions vary in different localities, and the operators would not take the risk of further indictments for doing acts for which they are now under bail. The miners' demand for 20 per cent increase in wages is preposterous. Their earnings are two and one half times the wages received in 1914, the present schedule having been fixed when wages were at the war-time peak. The men make \$7.50 per day, time and a half for overtime, and double time for Sundays and holidays. They work eight hours.

These high wages have increased the cost of bituminous coal more than 70 per cent at the mine, since 1914. Less work is done at the higher wages. Materials and supplies are higher, and these factors taken together have made the total cost of coal 105 per cent higher than in 1914, on the average. A report by the National Industrial Conference Board, New York, shows that wage earners who

made an average of 27.8 cents per hour in 1914 were getting 72.8 cents an hour in October, 1921. The weekly output of non-union miners is about 4,000,000 tons and with supplies on hand, there will be sufficient coal to last three months or longer.

Many dye and chemical plants have been running on short time all winter, and may continue on a restricted schedule until the tariff bill is passed, and the business situation becomes more settled. It is not probable that these industries will feel the effect of the coal shortage, because the strike is not likely to last through the summer.

GERMAN PROPAGANDA

The attacks made upon the American dye industry in "Issues of Today," backed by the Steuben Society of New York and the German-American Citizen's Alliance of Chicago, are only part of the general purpose of the German editors who seem to be the mouth-piece for German propaganda of all kinds. A writer advocates establishment of scholarships for teachers in the public schools who foster the study of the German language. Another contributor attacks the Alien Property Custodian saying he is a creature of war only, and his activities should cease.

The Steuben Society is a secret organization of Germans who require a secret oath from all candidates for membership. No information about this society is obtainable beyond the fact that its purpose is to enroll the estimated 26,000,000 people of German descent who live in the United States who seek the protection of this Government, many of whom have taken oath to be loyal to the American flag. Their idea of loyalty, as expressed in their newspaper, is to spread German propaganda to ruin American industries. The German-American Citizen's Alliance supported Mayor Thompson of Chicago because of his war antagonism to the Allies. Now it is uniting with the Steuben Society, through a third association called the All-American National Conference, a mere camouflage to conceal its Pan-German origin, to launch a nationwide political campaign "to counteract British propaganda, and restore the rights of American citizens of German descent."

Fashion Note: Those in touch with affairs of fashion approve the stand of Mrs. Grundy on salesmen's smiles. These are to be worn both broad and long during the coming season. They are especially desirable when talking with customers and must in all cases be worn when competitors are present. Business is better, you know.

A chemical salesman was given a case of _____ (deleted by order of the Prohibition Commissioner) on the occasion of his birthday recently. He says he has given up smoking to make his taste keener. As if he needed to!

Remembering Representative Frear's war record—and who in the chemical industry can have forgotten it?—his violent espousal of the bonus should be more humorous than efficient.

A Contributed Editorial

By ERNEST EBERHARD
Managing Editor Advertising & Selling

LOWER SELLING COSTS

Every manufacturer must find the cheapest and quickest way of placing his goods in the consumers' hands. He must pull the utmost out of every cent, every second, in holding and widening his market.

A market is largely a state of mind. People buy goods because they think that those goods will give more satisfaction than others of the same class either because of the quality of the goods or a price, or the character of the house behind it. No single factor will do more to bring about a favorable state of mind than advertising.

Advertising is mass selling.

It may complete the sale—or it may reduce the number of calls required by the salesman where the sale must be personally closed.

The cost of keeping a man on the road, salary and expenses, is about \$125 a week. He does well to have six interviews a day, with the average product. Each interview costs the firm about three dollars and fifty cents in actual cash. A certain number of these calls must be devoted to educational work, either wholly or in part; to making the prospect acquainted with the product and the character of the house behind it. The balance of the calls is devoted to straight selling. Now, if a man devotes five of his calls each day to educational work, that educational work is costing his firm \$17.50 to reach five men!

Five thousand men can be reached through their business paper for \$100. And instead of spending seventeen dollars and fifty cents in actual cash to reach five men a day, the firm can spend one cent to reach those same men and others like them, delivering the same identical message that is delivered by the salesman.

Seventeen dollars and forty-nine cents spent on a single prospect—and yet some firms wonder at the high cost of selling.

Advertising will sell prospects as a mass incalculably cheaper than is possible through personal salesmanship. That is its job, whether it aims to close the sale or to perform a purely educational function. Advertising—good advertising—pays for itself by lowering the cost of placing goods in the hands of the consumer. It is the only means of mass selling—and this is the day of mass selling, of reaching large numbers of buyers at one time.

That is why well managed advertising firms can do business cheaper—and make more profit—than non-advertisers. They have learned the value of low-cost selling. Some lines of industry have not yet learned this—but they are learning. And the firms which learn first—efficiently—are the ones which will retain their leadership in the years to come—or wrest it from the hands of those less far-sighted.

FIND THE PAPER VALUABLE

North Carolina State College of Agriculture and Engineering, Chemistry Department, writes to DRUG & CHEMICAL MARKETS: "We consider your journal of such importance that we do not wish to have a single number lost."

The Dennis Mfg. Co., Berkeley, Cal., writes: "We would not want to miss a single issue of your paper."

Higher Duties Fixed in The Senate Bill

House Leaders Unwilling to Compromise and Long Fight in Conference is Predicted—Senator Smoot Opposes Dye Embargo, But Favors 7 Cents a Pound and 50 to 60 Per Cent ad Valorem Rates—Finance Committee Increases Tariff on Flaxseed, Linseed Oil, Egg Yolk, and Egg Albumen—May Extend Licensing System for Chemicals and Dyes Another Three Months

(Special to DRUG & CHEMICAL MARKETS)

Washington, D. C., March 27.—Members of the Senate Finance Committee hope to complete their work on the tariff bill by the latter part of this week. The Committee still has to make final decision on several schedules, including the dye and chemical schedule. It is planned to have the Tariff bill taken up in the Senate so soon as the pending treaties are disposed of, but prospects for its speedy enactment into law are not bright. The theory upon which the Senate Finance Committee bill is framed, being based in the first instance on foreign valuation, with wide discretionary powers given to the President, is totally different from that of the bill approved by the House.

Efforts to reach a compromise with House leaders on the theory of the bill were unsuccessful, and this question will have to be fought out in conference. Many weeks may be consumed in reaching a satisfactory adjustment of differences in conference. Meanwhile, members coming up for re-election in the fall will be clamoring for a sine die adjournment of the session, without final action on the Tariff bill, so that the whole tariff question may go over until after the elections.

The report of the dye sub-committee on which the committee will act calls for a duty of 7 cents a pound and 50 per cent ad valorem on unfinished dye components, and a duty of 7 cents per pound and 60 per cent ad valorem on finished products. Senator Smoot, chairman of the sub-committee, is opposed to the dye license system, believing that with high rates of duty, together with flexible provisions which give the President authority to change rates and to shut out imports when there is unfair competition, the dye industry will be adequately protected. The duties in the Fordney bill as passed by the House are 7 cents per pound and from 30 to 35 per cent ad valorem American valuation. The Smoot rates are on the foreign valuation basis.

A report is current that Senator Watson, of Indiana, who with Senator Smoot and Representative Longworth, of Ohio, and Frear, of Wisconsin, make up the joint sub-committee which is handling the question of duties on dyes, now intends to join with Mr. Longworth in a report to the full committee in favor of an embargo on dyes. Senator Watson has been against an embargo. It is understood that he explains that it is desirable that both sides of the question should be presented to the Finance Committee. Representative Frear is opposed to an embargo.

The present system of licensing dye imports comes to an end by reason of legislative limitation upon the adoption of the new tariff law. There is now a move on foot to have that extended for at least a period of three months in order to permit of the further control of the situation in a time of unsettled conditions. A prediction was made by one of the committee members who will vote against a permanent embargo provision, that there will be a three months' continuation of the present system, with additional provisions permitting the President to raise rates of duty on any commodity

in the dye and chemical schedule when it is found that domestic production cannot be continued in face of foreign competition. In any event there is to be a general provision in the bill which will permit the President to invoke an embargo against any product where it can be shown that it is the vehicle for unfair practices in foreign trade.

The agricultural interests have obtained many increases before the Senate Finance Committee over the rates in the House bill. The duty on flaxseed in the Senate bill is 40 cents a bushel of 56 pounds. This is an increase from 20 cents in the House bill and from 30 cents in the emergency law. A compensatory duty of 3 cents a pound has been placed on linseed oil by the Finance Committee, but it is expected that this would be increased to 3½ cents to more nearly equal the duty on flaxseed. The Fordney bill rate is 2½ cents a pound. No duty was fixed in the emergency law on linseed oil. The question of duties on linseed oil was discussed by the committee on Monday, of this week. Poultry eggs in the shell carry a duty of 6 cents a dozen, the same as the House bill. The duty on whole eggs, egg yolk and egg albumen is 6 cents a pound as compared with 4 cents in the House bill, and dried eggs, egg yolk and egg albumen is dutiable at 18 cents a pound, compared with 15 cents in the House bill.

The proposed tariff rates on wool and textiles will be found on page 746 of this issue of DRUG & CHEMICAL MARKETS.

ALLIED CHEMICAL STOCK TOUCHES 65

Stock of the Allied Chemical and Dye Corp. advanced to 65, a high record for 1922, on reports of a larger dividend disbursement. The directors on Tuesday declared a quarterly dividend of \$1, however, and the stock sold off in the afternoon on the Stock Exchange, and closed at 63½. Operators in the stock bid the shares up on the report that the dividend would probably be increased from \$1 to \$1.50 quarterly, thereby placing the shares on a \$6 annual basis. The company's annual report is expected to be very encouraging to stockholders.

The annual report of the American Smelting & Refining Company for the year ended Dec. 31, 1921, shows total sales of \$130,810,592, as compared with \$166,928,481 for the previous year. Net earnings from operations amounted to \$8,180,970, a decrease of \$5,108,649, as compared with 1920, while after all charges and taxes there remained a balance of \$1,591,908, as against \$6,674,778.

Binney & Smith, manufacturers of carbon products, with offices at 81 Fulton street, New York, have leased new quarters at the Liggett Building, 42nd street and Madison avenue, for a term of years. The gross rental is about \$200,000.

The sulfur separating room in the Dosch Chemical Co.'s plant, Louisville, Ky., was wrecked by an explosion, on March 13, and five men were severely burned. The damage was estimated at \$2,000. F. A. Frazier, general manager, said the explosion was due to ignition of fine sulfur dust by a spark from the grinders.

Fire in the Atlantic Chemical Works, Bayway, New Jersey, on March 22, caused a loss estimated at \$200,000. Foamite belonging to the company was used by the firemen to extinguish the blaze.

GERMAN DYES NEEDED HERE, SAYS METZ

American Manufacturers Don't Know What Their Colors Will Do, He Tells Senate Committee, and the Mill Men Don't Know What They Want—New York Importer and Manufacturer Denies Statements of Previous Witnesses—Tells of Imports After War Began—Criticizes Acts of Francis P. Garvan, Alien Property Custodian—Says M. R. Poucher Was the "Master Mind" in Arranging for German Dyes During That Period

(Special to DRUG & CHEMICAL MARKETS)

Washington, D. C., March 29.—Herman A. Metz, of New York, told the Senate Committee that a great injustice had been done him at the dye hearing by the various witnesses who appeared before the committee, in statements made regarding him personally and his relations with the German government. Mr. Metz admitted that Germany had a dye monopoly, not only in the United States, but in the entire world before the European war. He spoke of the embargo which was placed on German dyes during the war and he said that through his efforts in the early days of the war, the German embargo on dyes had been raised. He did this, he said, in order to supply the textile interests of the United States who were his customers.

Mr. Metz admitted that he had criticized the domestic dye manufacturers for many of the statements which they made early in the war and which he said led the dye consumers to believe that American made dyes would appear on the American market in a short time. He denied, however, that he had ever said that dyes could not be manufactured in the United States.

Mr. Metz spoke in some detail of the dye importers who handled the German products. Originally, he said, the importers paid for the German dyes, but later the German dye manufacturers consigned the goods to the importers and in that way had an interest in the importing business. Mr. Metz told the committee of the agreement which was entered into to divide territory and set prices as a result of the passage of the Payne-Aldrich Tariff bill in 1909. After the Payne-Aldrich bill put intermediates on the free list, and colors at 30 per cent, it resulted in a combination and agreement as to price on direct black for cotton, made by the Schoellkopf plant of the National Aniline Co., and sold at that time at 17 cents. By this agreement the Buffalo concern got its main intermediate (H acid) at a special price and the black was boosted to 28 cents to the consumer. And the amount to be sold by each manufacturer was allotted and arranged abroad by the combination. Mr. Metz continued:

"The main dealers here interested in this arrangement were the National, from whom I obtained what I sold, the Cassella Co., and the Bayer Co. The combination had to meet competition from the Hollidays and from Levenstein, of England."

Regarding the bribery cases which, at the instigation of the Textile Alliance, were prosecuted in 1912-13, under the Sherman act, Mr. Metz declared that with the exception of one person all those mentioned were Americans and had no German blood. This bribery condition, he said, was not only prevalent in the dye business, but in other lines of business.

Despite charges that he was a "German agent," Mr. Metz declared, England never refused him a permit to import. He said the Textile Alliance had acted in the same capacity with England as he had with Germany, and that he could not see why he should be denounced for securing for American producers what they needed. He said this country in 1914 was left

without salvarsan, novocaine and other pharmaceuticals, and the textile industry was handicapped for lack of essential dyes. After a conference with the Secretary of State he made arrangements with Count von Bernstorff for obtaining these necessary products by chartering an American ship and personally holding the bonds of the consumers. The bonds were required to assure the Germans the products would not be re-exported to countries at war with Germany.

Mr. Metz spoke of the arrival of the submarine Deutschland, and said the Germans had realized about \$1,000,000 on each of the two shipments. He also spoke of the submarine Bremen which never arrived in the United States with its cargo of dyestuffs, and stated that it was never heard from.

Questioned by members of the committee, Mr. Metz said it was true that American manufacturers are now producing a few vat dyes, but not as many as are needed by consumers in this country. He intimated that the American dye manufacturers are falling down in the production of some of their colors. He further expressed the opinion that certain dyes will probably never be manufactured in the United States, owing to the great cost of experimenting before a perfect product can be produced and the comparatively small market after it is produced. He contended that the American dye consumer should be able to get what he wants if he is willing to pay for it. Mr. Metz referred to Francis P. Garvan as the "savior" of the American dyestuff industry.

Mr. Metz then took up the investigations which were made by the Alien Property Custodian of his plants and himself during the war. He stated that accountants had been placed in his office by the Alien Property Custodian, and that these accountants worked for practically five months. He had to foot the bill, he said, and he actually paid \$20,000 and is now being sued for an additional \$10,000.

Mr. Metz said that investigation into his business showed no German ownership, but that Mr. Garvan proposed to seize certain of his property, and return the rest, informing him it would be "good advertising" for him. Mr. Garvan, said the witness, expressed a determination to put the German dye makers out of business in this country.

During the war, Mr. Metz said, his plant was used to capacity to manufacture colors for uniforms. This produced a discussion as to the quality of American dyes. The trouble with the American manufacturers, lacking the experience of the Germans, Metz said, is that the Americans "don't know what their colors will do, and the mills don't know what they want."

Continuing his statement, Mr. Metz said that Morris R. Poucher, of the du Pont Dye Co., then vice-president of the Badische Co., here, and representing the largest manufacturer abroad at that time, was active after the outbreak of the European war in forming combinations to get German and other dyestuffs needed in this country. The witness referred to Mr. Poucher as a "master mind."

Mr. Metz continued his testimony on Tuesday, telling of actions brought against him by the Alien Property Custodian. He explained his connection with the Chemical Foundation and the American Dyes Institute at some length. Mr. Metz finished his testimony on Wednesday.

The American Synthetic Dyes, Inc., is named as debtor in a judgment for \$333,457 in favor of D. McKellar.

M. Rosenthal has obtained a judgment for \$1,072 against the Chrystal Piece Dye Works, Inc.

A Brief for Higher Arsenic

The Possibilities of a World-Wide Famine Critically Considered

By HOWARD W. AMBRUSTER

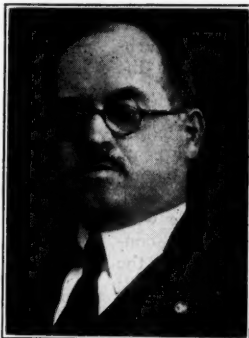
CONTROVERSY rages regarding the position of white arsenic in the American market. More or less violent fluctuations in the selling price of arsenic have always occurred both in normal times and under war conditions and these are pointed to as evidence of a controlled market despite the fact that the supply is, and always will be, irregular. The consumption also is not only variable from year to year, but is highly seasonal, as at least 80 per cent of the arsenic consumed in the United States is used in plants which operate only three to eight months out of twelve.

An unbiased consideration of all the many factors which affect and control the arsenic market in this country indicates that there is an arsenic shortage at the present time and in prospect, and that this shortage is more or less world wide. It has been brought about by three factors, namely: the smelters all over the world, where crude arsenic is produced as a by-product, have been shut down altogether or running only part time for many months; there is an increasingly smaller percentage of arsenic in the ores now being treated in the American smelters; and the normal and the abnormal increases in the use of arsenic for agricultural spray manufacture are in excess of any increase in the world's supply which is in sight at anything like the present market prices. Either the consumption of arsenic for arsenical spray and other requirements must remain at approximately its present stage, thereby limiting development along these lines, or else the supply must be stimulated by a much higher market level which will encourage production of arsenic from direct sources to supplement the present by-product supply, the total of which has no relation whatever to the demand.

Sources of Arsenic

The fact that arsenic is produced altogether as a by-product in smelters where precious and semi-precious metals are the direct and basic products is not generally appreciated by those who consider the situation from a commercial standpoint. In comparatively recent years this crude arsenic by-product was regarded as a costly nuisance by metallurgists, and the great development of the use of arsenical insecticides in recent years would probably have been impossible if the smelters had not been compelled by legislation to make extensive plant installations to control the fumes and dust from their furnaces. Not so many years ago one of the important smelting companies actually considered the advisability of dumping the crude arsenic into abandoned mine workings or pits dug for that special purpose.

It is evident, therefore, that the existing supply of refined arsenic from this source has no relation what-



The question of the existence of an actual, stringent shortage of arsenic has been largely one of demand for the current season, which has certainly failed to materialize as expected a few months ago. However, in spite of the course of the current market, there does exist a potential, world-wide arsenic famine. Mr. Ambruster, who has expressed his views of the situation in the accompanying article, has studied the arsenic situation very closely for many years past, and is probably one of the best informed men in the market today.

soever to the demand but is based on the percentage of crude arsenic in the ores available from a mining and metallurgical standpoint.

The arsenopyrite ores, containing an appreciable content of the more valuable metals in addition to iron, are probably the greatest sources of crude arsenic in the United States and Mexico, and the cobalt and nickel ores of Ontario largely comprise the balance of the supply on the North American continent. In recent years a considerable amount of arsenic has also been recovered from accumulations of speiss at the older smelters which has been retreated by modern methods for its precious metal content, but these stocks are diminishing rapidly and there are also substantial reasons to believe that the ores available for future smelting will not contain as high a percentage of arsenic as have those mined in the past. It should be understood that although arsenic is found combined with over one hundred different mineral products, it is only recovered when present in appreciable quantities in certain smelting operations.

Direct Production Unsuccessful

The direct production of arsenic has been attempted a number of times in this country, but unless and until the selling price shall increase to, and remain permanently at, several times its present level it is extremely unlikely that any such productions will be commercially successful. Most of these projects have been based on the refining of mispickel, or arsenopyrite, containing

no other element of value than iron, of which there are deposits scattered all over the American continent. It is, of course, easily possible from a technical standpoint to produce 99% arsenic from mispickel, but the plant installation and the process are both costly, and, in face of the violent fluctuations of market price and by-product competition, little real progress in this branch of the industry has ever been made. The cost of production of white arsenic in the by-product plants is largely a matter of bookkeeping in that the cost of the crude arsenic up until the time it is collected from the smelter flues is, strictly speaking, an essential step in the smelting operation.

In the manufacture of arsenical sprays, by far the largest single item is lead arsenate, the present production amounting to a considerably larger total than all the others put together.

Increase in Use of Calcium Arsenate

The demand for Paris green and other arsenites, however, is decreasing with the wider dissemination of technical advice to the farmer but the use of calcium arsenate promises to increase with great rapidity. The remarkable development of the market for this latter product has been greatly retarded for the time being by over production in the year 1920 and by the

financial troubles of the South in 1921, which prevented extended use of calcium arsenate and also caused so large a quantity to be carried over. However, the prospects this year point to an extremely heavy infestation of the cotton fields by the boll weevil, and unless some more efficient method of control is developed the demand for calcium arsenate in the South is bound to increase tremendously in the next few years. How this demand shall be met by the available arsenic supply is the question which is disturbing entomologists and others directly interested in the problem.

Market History

The market price of white arsenic has fluctuated in the last fifteen years between one and one-half cents and twenty cents per pound, the low level having been touched in the pre-war period and the high mark at different times within the last few years. The wide fluctuations were of course, partially due to war conditions but these conditions were intensified by the various irregular factors, which always have and always will affect this product.

During the war the government finally stepped in and fixed the selling price by the producers at 9c per pound, allocating the available tonnage to the various industries according to their importance from a "win the war" standpoint. Since then the extreme demand was reached in 1920 when the open market price stayed around 15c for several months and touched 20c for short periods of acute demand for immediate delivery of carload quantities. With the sudden decline of prices for all raw materials and finished products in the latter part of 1920, arsenic went down swiftly with the rest and some contracts were made between five and six cents per pound in the last quarter of 1921. The price reacted to seven and one-half cents in the early part of this year when the insecticide plants got into operation, and, while the peak of the demand has probably been passed for this season, the market is now in a very erratic state with little real tonnage available for spot demand. There is also the prospect of another flurry when the production of calcium arsenate shall reach its maximum for this season in May and June.

Market Prospects

In face of the actual shortage of arsenic stocks and current production the world over, the only reason why the market in the United States has not reacted more violently than it did this season is due to the fact that many manufacturers carried over from last season large stocks of Paris green and lead and calcium arsenates and the current demand has been eased because the spray production has been divided this year, the manufacture of calcium arsenate for the South having been postponed until the latest possible date and not overlapping, as it must in a normal year, the production of other arsenical spray materials. In addition to the increased demand in sight for the future, the selling price in the United States will be stiffened by the passage of the tariff now under consideration. Arsenic is at present on the free list but the domestic producers have urged a relatively heavy specific duty and the bill under consideration provides for a tariff of 25 per cent ad valorem. However, as the ultimate consumer of the bulk of the arsenic is the farmer the tariff makers are hardly likely to go to extremes in protecting the American producer against the imported arsenic, as it is evident that the domestic supply is woefully less than the actual consumption. The smelters can hardly qualify as an infant industry in the eyes of the "Agricultural Bloc" at Washington. Taking the figure for 1920 as a basis of estimate

the consumption of arsenic in this country may be conservatively stated to approximate 16,000 tons per year, of which about 12,000 tons are of domestic production and the balance imported from Canada, Mexico, Germany, Japan, and Belgium.

It is unlikely that there will be any appreciable increase in the total American production, or in the by-product production abroad. The reverse is more probable as far as the domestic smelters are concerned, on account of the ore situation and diminishing stocks of smelter dumps containing an appreciable percentage of arsenic. It is also unlikely that a larger tonnage of imported arsenic will find its way to the American market at present price levels, the market for arsenical products being world wide and the use of spray materials increasing in all agricultural countries, though in none so rapidly as in the United States.

To sum up the market situation for both the arsenic producer and consumer, it might be said that it represents an unending chain of controlling but conflicting elements. The producer has to run his smelter all the year round in normal times but his arsenic production varies according to the ores he is treating and he cannot have a uniform selling price in any event because he cannot always ship as he produces. The primary consumer, the spray manufacturer, has an intermittent and irregular market for his products on the one hand and a fluctuating raw material on the other, and therefore he cannot run his plant all the year round unless he speculates first on the cost of his principal raw material and secondly on the market price and demand for his finished products. The ultimate consumer, the farmer, will not buy insecticides, as a rule, until the bugs actually appear or at least until the season approaches close enough for him to forecast his needs.

It is not to be wondered at that the arsenic market is a subject of conjecture and controversy, and it will undoubtedly continue so indefinitely.

The Salesmen's Association of the Chemical Industry, will hold a meeting Thursday, March 30, at the Milanaise Kitchen, 169 W. Houston st., at 6 p. m. A call for a full attendance has been sent out by T. R. L. Loud, chairman of the entertainment committee, who promises a program that will make everyone feel delighted that his senses of sight, taste and hearing are still good.

The Mexican Chamber of Commerce of the United States, Woolworth Building, New York, announces its incorporation under the laws of New York, and submittal of its plans to the Secretary of State at Washington. The purpose is to promote the business relations between the United States and Mexico.

Judge Oscar A. Trippet, of Los Angeles, Cal., has rendered a decision whereby F. M. Smith, of San Francisco, has been given title to fifty-four borax claims in the Death Valley region. The property is said to be worth \$20,000,000 and has been in litigation for several years.

The assignee of the Ernst Zobel Co., New York, has brought suit for \$2,200 against the Newport Chemical Works over an agreement for the purchase of a carload of resin.

Montagu Sterling, president of E. Fougera & Co., New York pharmaceutical importers, is in Europe in the interest of his company.

QUOTATIONS ON CHEMICAL STOCKS

	Bid	Asked		Bid	Asked
Alr Reduction	53	54	H'k Electro	55	65
*Allied Chem. & D. 63 1/2		64	H'k Electro, pf.	60	70
*Allied Ch. & D., pf. 109		110	Int. Agricult.	10 1/2	11 1/2
*Am. Ag. Ch.	39	40	Int. Agricult., pf.	39	40
*Am. Ag. Ch., pf.	66	67	*Int. Nickel	14	15
Am. Chiclé	9 1/2	10	*Int. Nickel, pf.	70	71
Am. Chiclé, pf.	35	40	*Int. Salt	50	60
*Am. Cot. Oil.	25	26	K. Solvay	60	60
*Am. Cot. Oil, pf.	54	56	*Mathieson Alk.	33 1/2	34 1/2
Am. Cyan.	15	20	Merck & Co., pf.	70	73
*Am. Cyan., pf.	35	45	Merrimac	77	79
*Am. Druggists S.	5 1/2	6	Mulford Co.	45	50
Am. Glue	40	45	Mutual Co.	150	..
*Am. Linseed	33 1/2	34	*National Lead	88	90
*Am. Linseed, pf.	55	57	N. J. Zinc	144	148
*Am. Malt	12	13	Niag. A., pf.	96	100
*Am. Zinc	14	15	Parke, Davis & Co.	88	90
*Amer. Zinc, pf.	37	37 1/2	Penn. Sal.	65	67
Atlas Powder	111	116	People's Gas, Chi.	51 1/2	52
Atlas Powd., pf.	74	76	Procter & Gamble.	676	685
British Am. Chem.	1	..	Procter & Gam., pf.	101	101 1/2
By. Prod. Co.	57	65	Kollin Ch.	80	80
Carborundum	135	135 1/2	Nol. Ch., pf.	90	90
Carborundum, pf.	115 1/2	116	Royal Baking Po.	105	110
Casolin Co.	30	45	Royal Bak. Po., pf.	92	94
Celluloid Co.	104	104 1/2	Sherwin-Williams	520	540
Celluloid Co., pf.	109	109 1/2	Stand. Ch.	90	100
Ches. Mfg.	192	196	Swan & Finch.	35	45
Ches. Mfg., pf.	111	114	*Tenn. C. & Chem.	11	12
*Corn Products	104	105	Tex. Gulf. Sul.	42 1/2	43
*Corn Products, pf.	113	114	Union Carbide	52	53
*Davison Chem.	56	56 1/2	Union Sulphur	65	67
Dow Chem.	200	200	*Un. Drug	48	49
Dow Ch., pf.	103	103	*Un. Drug, 1st pf.	48	49
Du Pont	90	95	*Un. Dyewood	31	38
Du Pont, pf.	74	76	*Un. Dyewood, pf.	94	96
Du Pont Chem.	9	9 1/2	Un. Gas, Imp.	38	39
*Freeport, Tex. Sul.	17	18	Un. Gas, Imp., pf.	50	51
*Freeport, Tex. Sul. pf.	91	93	U. S. Gypsum .....	..	..
Grasselli	130	130	*U. S. Indus. Al.	46	47
Grasselli, pf.	90	95	*U. S. Indus. Al., pf.	93	96 1/2
Hercules, Powder.	157	156	*Va.-Car. Ch.	35 1/2	36
Hercules, Powd., pf.	92	95	*Va.-Car. Ch., pf.	75	76
Heyden Chem.	1	1	*V. Vivaudon	10	10 1/2

*Listed on New York Stock Exchange

The annual report of the Callahan Zinc-Lead Co., shows current liabilities \$12,135 at the end of 1921, compared with \$164,818 the year before. The profit and loss surplus was \$504,044, compared with \$279,055 at the end of 1920. No mining was carried on during 1921. Miscellaneous income was \$10,118 and proceeds from stock sales \$381,793. Maintenance, development and general expenses were \$166,396.

Judge Knox has appointed Martin Conboy receiver in equity for Isaac Brandon & Bros., exporters, 17 Battery place, under \$25,000 bond in a suit instituted by the Panama Banking Company which asserts a claim of \$5,000 against the firm. It is stated that the liabilities of the firm amount to \$1,000,000 and that its assets aggregate \$2,000,000.

The McRae Drug Stores, Inc., 2595 Broadway, filed schedules in bankruptcy March 24, listing liabilities of \$24,333 and assets of \$10,710, main item of which is stock, \$10,000. Principal creditors listed are Commonwealth Bank, \$3,000; M. Pettigor & Co., \$2,800, secured; Benjamin T. Titmer, \$2,250 secured.

A petition for adjudication in bankruptcy has been filed in the Federal court, Chicago, against the Liberty Chemical Works, by the William H. Schutte Co., with claim of \$40; Jewett & Sowers Oil Co., \$544; Procter & Gamble, \$981.

Isidor Sherman, druggist, 3681 Broadway, filed a petition in bankruptcy March 24, listing liabilities of \$6,037 and no assets. Principal creditor listed is the Broadway Realty Corporation, \$3,000.

A petition in bankruptcy has been filed by Mark A. Macomber, doing business under name of Crystal Wax Co., Joliet, Ill. Liabilities, \$15,912. Assets, \$14,991.

A judgment for \$3,626 against the De Miracle Chemical Co., New York, has been filed by L. F. Sniffin.

Financial Notes

A block of 66,667 shares of stock, no par value, of Sterling Products, Inc., has been sold by Hornblower & Weeks, Blair & Co., and Bell & Beckwith. The proceeds will be used to acquire the entire capital stock of the Wells & Richardson Co., Inc., manufacturers of Diamond Dyes. The products manufactured and sold by Sterling Products, Inc., and subsidiaries include Bayer's aspirin, cascates, danderine and other articles, some of which have been on the market for fifty years. Application for listing the stock on the New York Stock Exchange is expected. The corporation's 1921 net was \$2,532,847. A dividend of 15 per cent was paid on the old stock, equivalent to \$2.50 per share on the new stock.

The General Asphalt Co. will report for 1921 a volume of business transacted by its subsidiaries of approximately \$10,000,000, as compared with \$15,000,000 the preceding year, yielding a trading profit of \$613,000, after an arbitrary charge for depreciation of plants of \$294,000. The trading profit for 1920, was \$2,845,000. The charges for general and miscellaneous expenses and interest amounted to \$1,274,000; reserve set aside for depreciation of accounts and the redemption of debentures, \$238,000; total, \$1,512,000. Deducting therefrom the trading profit of \$613,000 results in a deficit for the year of \$899,000, which with dividends paid, \$374,000, makes a total reduction in surplus of \$1,273,000.

The annual report of the Diamond Match Company for the year ended December 31, 1921, shows a surplus after all charges and dividends of \$314,201. Gross earnings for the year amounted to \$4,444,130, and net, after deducting taxes and depreciation and amortization reserves amounted to \$1,671,403. The balance sheets as of December 31, 1921, shows cash on hand and in banks of \$1,191,043, and inventory valuation of \$12,767,490. Total current assets, including inventory, amounted to \$15,887,640, and total current liabilities of \$2,627,641.

The United Drug Co. has declared the regular quarterly dividend of 87 1/2 c a share on the first preferred, payable May 1 to stock of record April 15.

The Pennsylvania Salt Manufacturing Co. has declared the regular quarterly dividend of 2 1/2 %, payable April 15 to stock of record March 31.

New Incorporations

Takamine, New York, capital \$50,000. Export and import. E. Takamine, G. V. Hart, I. H. Cohen. Attorneys, Guggenheimer, Untermyer & Marshall, 120 Broadway.

Newark Color and Dye Works, Newark, N. J., capital \$100,000. Irving Rauchberg, Mordecai Segal, Samuel M. Hollander, Newark. Industrial Laboratories, Inc., 640 Chestnut st., Grand Rapids, Mich. Testing laboratory. Elmer F. and Bert A. Way, Walter K. Schmidt.

Endyne Chemical Co., Wilkingsburg, Pa., capital \$100,000. H. G. Hurney, Pittsburg, Pa.; Geo. L. and B. B. Ayres, Wilkingsburg. Continental Color and Chemical Co., Boston. Tracy L. Evans, 34 Merchants Row, Boston.

Peninsula Phosphate Corp., Wilmington, Del., capital \$1,500,000. Incorporated by Corporation Trust Co. of America.

Coral Chemical Co., Buffalo, N. Y., capital \$60,000. R. H. Robinson, G. D. Fogarty, J. T. Penfield. Attorney, S. V. O'Gorman, Buffalo.

Biochem Laboratories, Brooklyn, capital \$5,000. Alcohol. A. E. Daub, H. Whyman, J. E. Gauthier. Attorney, D. Geiger, 286 Fifth ave., Brooklyn.

Charles Maybaum & Son, Newark, N. J., capital \$150,000. Rendering plant. Charles Maybaum, Milton Maybaum, Hannah Maybaum, Newark.

Capital Increases—Colac Chemical Co., Glens Falls, N. Y., from \$25,000 to \$300,000.

Name Changes—Takamine Commercial Corp., New York, to Ebentak Corp.

The Heavy Chemical Market

Current Spot Quotations of Heavy Chemicals, Pages 754-755

LESS FEAR OF DRASTIC REDUCTIONS

Heavy Chemical Buyers Inclined To Increase Their Stock—Resale Caustic Soda and Soda Ash on Spot Slightly Higher—Imported Sodium Chlorate and Soda Prussiate Lower Here and Abroad—Glacial Acetic Acid Lower

PRICE CHANGES IN NEW YORK (Stocks in First Hands)

Advanced

Soda Caustic, Resale, 5c cwt.

Declined

Acid Acetic, Glacial, 1/2c lb. Sodium Chlorate, Imp., 1/2c lb.
Soda Prussiate, 1/2c lb.

Trend of the Market

	Today	Last Week	Last Month	Last Year
Acetic Acid, Glacial.....lb.	\$.08 3/4	\$.09	\$.09	\$.08
Sulfuric Acid, 66 deg.....ton	16.00	16.00	16.00	20.00
Bleaching Powder, Works.....100 lbs.	1.90	1.90	2.00	2.40
Copper Sulfate.....100 lbs.	5.40	5.40	5.40	5.25
Potash, Caustic.....lb.	.05 3/4	.05 3/4	.05 1/2	.10
Saltpetre, gran.....lb.	.07 3/4	.07 3/4	.07 3/4	.09 1/4
Soda Ash, 58 p.c.....100 lbs.	1.80	1.75	1.65	2.10
Caustic Soda, 76 p.c.....100 lbs.	3.65	3.60	3.30	3.70
Potassium Bichromate.....lb.	.10	.10	.10	.12 1/2
Average.....	3.278	3.213	3.203	3.789

Improvement in heavy chemical business during the week has been slower, but the volume of business done continues fairly satisfactory. Consumers are showing a trifle less fear of further drastic reductions in prices and are a little more inclined to increase their stocks. Prices generally have remained stationary with a few minor changes. Resale caustic soda and soda ash in the spot market have advanced slightly. Glacial acetic acid is offered lower. Imported sodium chlorate is lower. Soda prussiate is lower on lower prices from abroad. Potassium carbonate is more active and prices tend to firmness. Imported barium chloride is firm and scarce. Sodium nitrite is very firm.

Acid, Acetic—The makers' basis, \$2.50 per hundred for 28 per cent in barrels, unchanged. Glacial offered lower at 8 1/2c, up to 9 1/2c for single barrels.

Acid, Hydrobromic—Technical 48 per cent in ten carboy lots, spot, 35c. Pure, 40 per cent, 40c.

Acid, Hydrofluoric—Steady at 7c for 30 per cent in barrels and 10c@11c for 48 per cent in carboys. Other strengths in proportion.

Acid, Hydrofluosilicic—Quoted at 10c@12 1/2c for 35 per cent as to quantity.

Acid, Mixed—Firm at 8c@8 3/4c per unit of nitric and 1c per unit of sulfuric in tank cars f. o. b. makers' works.

Acid, Muriatic—Prices are still uncertain on competition between makers. Basis for commercial is \$1.10@ \$1.35 per hundred for 20° in carboys, carlots and less, freight allowed.

Acid, Nitric—Unchanged from 5 3/4c@6 1/2c for 38° in carlots and less in carboys, freight allowed.

Acid, Oxalic—Works prices, 11 1/2c per pound for ten barrels. Spot at 13c ex-store.

Acid, Sulfuric—Price basis firm at \$16.00 per ton for 66° in tank cars at makers' works. Rumors of \$15.00 without foundation for prompt cars. Tanks of 60° at works, \$10.00@ \$10.50 per ton.

Acetone—One maker as low as 8c in carlots, drums. Others quote 9c. Up to 11c for small lots.

Acetic Anhydride—Makers are at variance. Prices 32c@40c as to brand for quantity at works.

Acetyl Chloride—Redistilled quoted at 45c@47c as to quantity.

Alums—No change. Ammonia lump, makers, 3 1/2c @3 3/4c. No imported. Potash lump, makers, 5c@5 1/2c. Imported 3c@3 1/2c. Chrome, ammonia and potash, 6 1/2c@7c.

Aluminum Sulfate—Imported iron free not to be had below makers' 2 1/2c@3c here. Commercial, spot, \$1.60 @ \$2.00 as to quantity.

Ammonium Chloride—Prices very firm. Domestic gray, 7 1/4c@7 1/2c against 7 1/2c@7 3/4c for imported. Domestic white granulated, 7 1/2c@7 3/4c against 7 1/2c @7 1/2c for imported. Imported prices tend firm.

Arsenic—White dull at 6 3/4c@7 1/2c as to sellers. Red 12 1/2c@13c.

Barium Chloride—Imported very firm with little to be had spot below \$80.00 per ton. Arrivals within a short time at \$75.00. Makers not offering.

Bleaching Powder—Importers less active. Makers name \$1.85 prompt cars works, and \$1.75 on contract cars. Imported spot not less than \$1.90.

Calcium Arsenate—Makers name 10c@13c as to brand and quantity for powdered.

Chlorine—Liquid chlorine in cylinders named at 5c @5 1/2c at works as to quantity.

Lead Arsenate—Makers name 11 1/2c@13c as to brand and quantity.

Phosphorus—Domestic red, 50c, against imported at 25c@27c. Yellow, 25c@35c as to brand, against 23c@25c for imported.

Phosphorus Oxychloride—Makers name 35c@37c.

Phosphorus Trichloride—Quote at 35c@40c as to quantity.

Potash, Caustic—Imported very firm at 5 3/4c@6 1/2c per pound in carlots and less. Prices higher for imported. Domestic nominal at 8c@10c.

Potassium Bichromate—Crystals at 10c@10 1/4c and powdered at 13c@13 1/2c in barrels, carlots and less.

Potassium Carbonate—Calcined 80-85 per cent, firm at 4 1/2c@5c. Hydrated 80-85 per cent, 6 1/4c@8c as to seller and quantity. High grade 96-98 per cent calcined, 6 1/4c@7 1/2c as to seller.

Potassium Chlorate—Imported firmer at 6c@6 1/2c against domestic at 8c@10c. Pyrotechnic fine powder, imported, 7c@7 1/2c.

Potash Prussiate—Yellow firm at 26c@27c. Red nominal.

Soda Ash—Spot resale in bags, firmer at \$1.80@ \$2.10 as to quantity. Makers quote cars at works in bags basis 48 per cent at \$1.25@ \$1.30. Contracts at \$1.20.

Soda, Caustic—Spot firmer at \$3.65@ \$3.75. Makers hold fused at \$2.57 1/2@ \$2.60 basis 60 per cent works for carlots. Contracts at \$2.50. Ground and flake, prompt cars works, basis 76 per cent actual, \$3.72 1/2 in drums. Contracts \$3.65. Low grade 60 per cent caustic \$2.65 flat cars works.

Sodium Chlorate—Imported lower at 6c@6¼c. Domestic 7c.

Sodium Nitrite—Firm at 9½c spot. Makers quote 9c works. Odd lots on spot occasionally at 9c.

Soda Prussiate—Easier. Spot 16¾c@17¼c as to seller. Makers not offering.

Metals

Copper—Prime lake, 13c. Electrolytic 12 7-8c. Casting 12 5-8c.

Lead—Firm. Spot \$4.75@\$4.80 per hundred.

Tin—Straits firmer at 29c. American pure 28¾c. American 99 per cent, 28½c.

Zinc—Neglected here at \$4.95@\$5.00 per hundred.

Heavy Chemical Notes

Litter & Allen, 233 Broadway, New York, have been appointed selling agents for the American Nitrogen Products Co., Seattle, on nitrite of soda.

Red prussiate of potash is quoted at 3c 3d per pound (70½c) by English makers at London. Yellow prussiate of soda is quoted there at 9d per pound (16.3c).

The confirmation of advances on potash salts by the German Government has had a stiffening effect on all potash compounds. Potassium carbonate and caustic potash are expected to show advances here on any considerable buying as stocks here are very low.

The customs service of the Treasury Department reports that the agents of the department have not found any evidence of dumping of barium peroxide by German exporters.

The Rotary Club of Sheffield (Ala.) has issued a book on Muscle Shoals, Ala., entitled "Facts, Views, Maps and General Information on the Muscle Shoals District."

The Board of United States General Appraisers has handed down a reappraisal decision, fixing the correct value for customs purposes on the following merchandise: Potassium bromide, from Hordische Saltpeter Gesellschaft, Hamburg, Germany.

The Butterworth-Judson Co. is to be allowed to store picric acid at the plant of the Nixon Terminal and Storage Co., Nixon, N. J., if the company takes out licenses and reduces the quantity of acid to 150,000 pounds for each container.

The Insecticide and Disinfectant Manufacturers' Association will hold its next convention at Chicago, June 12 and 13. The change to the West was decided upon in the interest of western members who are increasing every year. The move was decided upon by the Board of Governors.

Some handlers of yellow prussiate of soda believe that prices have gone into a slump which will carry them down to 15c on the spot before mid-summer. The spot market has weakened rapidly during the past two weeks following lower prices for shipment from abroad. Sales have been made as low as 16½c duty paid for April shipment. Makers are in the market with very small lots but their prices are too high to attract attention at present. Domestic stuff cannot become a factor in the market until the coke ovens get into broader operation.

JANUARY EXPORTS OF SODA COMPOUNDS

(Special to DRUG & CHEMICAL MARKETS)

Washington, D. C., March 29.—Exports of soda ash, sal soda, and caustic soda, during January, are estimated as follows by the Bureau of Foreign and Domestic Commerce: Soda ash, 2,432,113 pounds; sal soda, 722,406 pounds; caustic soda, 10,927,529 pounds; Cyanide was exported to the amount of 125,601 pounds, principally to Mexico, Nicaragua, Costa Rica and the Philippines. About 1,014,974 pounds of bicarbonate of soda was exported, principally to Canada, Mexico, Straits Settlements, Venezuela, and the Philippines. The countries taking soda ash, sal soda and caustic soda, with the amounts, follows:

Countries	Soda Ash Pounds	Sal Soda Pounds	Caustic Soda Pounds
Belgium .....	.....	.....	266,882
Denmark .....	.....	.....	111,178
Germany .....	.....	.....	954,787
Italy .....	.....	.....	1,182,158
Netherlands .....	.....	.....	55,489
Sweden .....	.....	.....	22,239
England .....	.....	.....	.....
Canada-Maritime Provinces..	84,700	3,840	122,224
Quebec	1,051,435	644,660	1,044,650
Prairie Prov. ....	.....	.....	.....
Br. Columbia	237,060	.....	725
Costa Rica .....	.....	.....	7,600
Guatemala .....	.....	125	7,900
Honduras	6,000	.....	29,700
Nicaragua	7,700	498	18,949
Panama	4,500	16,160	11,202
Mexico	85,948	4,620	482,996
Jamaica	600	5,725	530
Cuba	248,960	35,974	648,437
Dom. Rep.	7,500	135	80,724
Argentina	447,716	.....	425,080
Brazil	171,900	.....	380,319
Chile	7,500	.....	70,000
Colombia	10,000	.....	53,675
Peru	1,500	750	67,775
Uruguay .....	.....	.....	158,680
Venezuela	10,720	1,429	73,562
China	44,000	.....	349,917
Java & Madura.....	.....	.....	38,000
Japan .....	.....	.....	4,038,264
Philippine Is.	4,334	.....	70,000

\$4,000,000 IN TEXAS SULFUR DEAL

At the annual meeting of the Freeport-Texas Co. which will be held on April 3 the stockholders will be called upon to ratify the contract entered into between the Texas Co. and the Freeport Sulphur Co. and also to vote upon a financial plan to raise the necessary funds to carry out the terms of a contract made by the Texas Co. with the Freeport Sulphur Co. providing for the development of the Texas Co.'s large sulphur deposit located at Hoskins Mound, Texas. It will be necessary for the Freeport Texas Co. to advance money to the Freeport Sulphur Co. for development and working capital. The stockholders will be asked to ratify the following financial arrangements:

The issue and sale of \$4,000,000 aggregate principal amount of bonds of the company payable in 10 years with interest at 7 per cent, convertible at the option of the respective holders into the company's capital stock, which bonds shall contain provision for redemption, sinking fund and conversion.

It is proposed to offer the bonds to the stockholders in proportion of their respective rights.

Thomas Nevins has served notice on the Freeport Sulphur Co. that the Mound Co has good cause for action for forfeiture of the lease of the Mound Co. to the Freeport company, and declares that unless it institutes proper appropriate legal proceedings he will himself institute such proceedings as a stockholder of the Mound Co. He has already brought a similar suit through the Texas Development Co. under the same lease against the Texas Co. It is pending in the New York Supreme Court.

The Fine Chemical Market

Current Spot Quotations of Fine Chemicals, Pages 750-752

ACTIVE MOVEMENT IN CITRIC ACID

Seasonal Buying—Imported Above American Makers
—Glycerin Weak—Cocoa Butter Again Lower—Cod
Liver Oil Advance Maintained—Denatured Alcohol
Demoralized—Producers' Revisions Lacking

PRICE CHANGES IN NEW YORK

(Stocks in First Hands)

Advanced

Acid Citric, Import., 1/2 lb. Potass. Iodide, Resale, 5c lb.
 Soap, Green, U.S.P., 2c lb.

Declined

Alcohol, Denat., 3c gal. Glycerin, C.P. resale, 1/2 lb.
 Camphor, Jap., ref., 1c lb. Licorice Mass, 3c lb.
 Cocoa Butter, Bulk, 2c lb.

Trend of the Market

	Today	Last Week	Last Month	Last Year
Acetanilid	\$.31	\$.31	\$.31	\$.28
Acid Citric, Import .....	.45 1/2	.45	.44 1/2	.47
Caffeine, Alkaloid	3.75	3.75	3.75	6.00
Calomel, American .....	.88	.88	.88	1.00
Camphor, Jap., ref. ....	.87	.88	.92	.70
Iodine, Resublimed	4.05	4.05	3.80	3.75
Menthol	6.25	6.25	5.25	4.25
Morphine Sulfate	4.80	4.80	4.80	5.20
Potassium Bromide, Cryst. ....	.23	.23	.19	.37
Quinine Sulfate, Import .....	.58	.58	.58	.62
Sodium Salicylate .....	.32	.32	.32	.31
Strychnine Sulfate .....	.76	.76	.88	1.55
Average	1.90	1.90	1.85	2.08

Business in medicinal chemicals was not quite as active during the early part of the current week as it had been. Significant revisions by American producers were lacking. Demand was confined principally to the smaller routine quantities. Demand for citric and tartaric both spot and to arrive was active. Cocoa butter is weaker. The flurry in cod liver oil has died down. Glycerin is softer, particularly resale stocks.

Acid Citric—Active buying both spot and to arrive noted here this week. Spot tightly held higher at 45 1/2c kegs, to arrive 39c in bond, 44c duty paid. For shipment 38 1/2c c. i. f. American makers at 45c barrels crystals, but selling only regular consuming trade and avoiding speculative buying.

Acid Tartaric—Although spot sellers at 26c barrels crystals and 26 1/2c kegs are noted, 24c in bond is firmly held to arrive. Seasonal buying is active. Import cost means 27c spot. Makers at 30c barrels unchanged.

Alcohol—Denatured market demoralized by price slashing. Some distillers dumping goods overboard at ridiculous prices, particularly Nos. 5 and 6. Named prices 31c@34c drums, barrels inclusive. Resale at 30c@32c. Wood alcohol also very weak under price cutting, 55c drums, barrels 95-97, 75c pure barrels openly named.

Bromides—Position uncertain. Spot potash imported 16 1/2c@17c.; soda 16c@16 1/2c. Potash for shipment 14 1/2c c. i. f. American makers, potash 23c barrels 100 pounds; soda 20c.

Caffeine—Demand steady. Two American makers getting the business at \$3.75@\$4.00 pound alkaloid 100 pound lots. Importers out of it owing to import cost making \$4.50 market here necessary for profit. All current prices under cost of production.

Camphor—Dull and quiet on spot. Slabs weakly held at 87c cases, Jap refined spot. Jap tablets rou-

tine demand 95c@99c. American refiners at 96c barrels bulk gum. Tablets 99c@\$1.02 as to packing.

Cocoa Butter—Heavy imports last week have further softened prices here. Bulk in 200 pound bales spot at 27c less ton lots, 26c ton lots. Fingers, cakes, and special packings, unchanged 34 1/2c@37c pound as to brand.

Cod Liver Oil—The flurry in cod liver oil last week, a jump in the price from \$16.00@\$18.00 barrel up to \$21.00@\$23.00 for spot Norwegian, soon died down owing to lack of interest at this season. The higher prices remained, however. Demand here is dull. Norway at \$22.50 c. i. f. for shipment. Newfoundland unchanged at \$19.00 spot.

Cream Tartar—Spot goods imported selling freely at 23 1/2c barrels although quantity business is being done under this here. For shipment 20c c. i. f. American manufacturers at 26 1/2c barrels 100 pound lots unchanged.

Formaldehyde—Makers name 8 1/2c pound barrels carlots works. This can also be done on spot for less carloads. Soft owing to uncertain position of wood alcohol.

Glycerin—Weak. Refiners quote 15 1/2c drums, 17c cans unchanged. Outside lots offered 14 1/2c drums, 15c cans. Dynamite 13 1/2c.

Iodides—Resale potassium iodide here is firmer, a lot at \$3.10 being inside. Manufacturers at \$3.15, 50 pound lots.

Licorice—Mass in cases cheaper at 22c pound. Powdered 40c.

Menthol—Shipment position firmer at \$5.35 c. i. f. from Japan. Spot stocks firmly held at \$6.25 pound cases, \$6.40 less cases, without change. Sellers control situation here. Reports of higher prices forward. Demand steady routine.

Mercury—Spot firmer in spite of recent arrivals. Sales mostly of jobbing character at \$49.50 and \$50.00 flask. Larger lots \$49.00. Any real buying would send market up as stocks are well held, according to reports.

Quinine—Steady demand of routine nature. Imported 100s spot 58c ounce. American manufacturers 60c unchanged basis 100 ounce tins.

Soap—Cheap lots of green soap held here cleaned out. Prices up. Inside spot 7 1/2c to 8 1/2c for barrels and kegs.

Objection to the proposed revival of the patent convention of 1909 with Germany was contained in statements issued this week by Dr. Charles H. Herty, president of the Synthetic Organic Chemical Manufacturers' Association, and J. I. Tierney, secretary of the Manufacturing Chemists' Association. The statements draw attention to the necessity of a clause providing that patents must be worked in the United States. It is declared that the Germans used their patents obtained in this country to stifle the American dye industry by not using the patents here, but carrying on the manufacture of dyes and chemicals under patents in Germany.

Fine Chemical Notes

Resale offerings of C. P. glycerin are adding their weight in forcing down values. Outsiders are shading refiners' quotations.

Another flood of cocoa butter last week was effective in further forcing down the price here. About 5,977 bales and bags came in at New York from Rotterdam and Hamburg.

If the use of "premedicated" alcohol in the manufacture of U.S.P. and N.F. products is made mandatory, approximately five hundred separate formulae will have to be carried in stock.

Reports from Bergen, Norway, indicate the total catch of cod up to March 9 as 11,400,000 compared with 13,700,000 last year. The yield of medicinal oil, on which the market has advanced in Norway, was 22,960 hectolitres as against 24,766 at the same time last year.

Holders of spot imported citric acid are not selling in a big way to speculators, the recent activity having attracted buyers who evidently foresee a higher market as warm weather approaches. Spot stocks are said to be sufficient for all reasonable requirements of the consuming trade for some months.

The present price slashing business in denatured alcohol cannot continue indefinitely without disastrous results. If it does not bring failure down upon the distillers who make a practice of this method of doing business, it most certainly will bring down the prohibition authorities sooner or later, is the belief of a market authority here.

The sharp rise in cod liver oil last week following a jump in Norway on the higher exchange basis and reports of a big deal in oil having been put through with the Russian Soviet, was not supported very fully in this market. With buying small and shrinking as warm weather approaches, the rise took on more the appearance of a speculative advance which was to some extent unsuccessful.

The annual report of Merck & Co. for the year ended Dec. 31, 1921, shows a total net loss of \$732,999.76. Net loss from operations after depreciation, is \$699,521.57. Surplus Dec. 31, 1921, was \$134,280.95. The balance sheet for the same period shows assets of \$4,005,064.54, and current liabilities of \$275,783.59. Reserve for contingencies amounts to \$128,954.42. Total capital stock amounts to \$3,595,000.

In the list of this year's personal property tax returns at St. Louis, Edward Mallinckrodt, chemical manufacturer, is second on the list with a return of \$477,370 as compared with \$535,730 last year and \$535,050 in 1920. He headed the list last year. Among other figures are those of Edward Mallinckrodt, Jr., with \$173,310. Last year he made a return of \$153,950.

David H. Blair, Commissioner of Internal Revenue, is sending the following memorandum to collectors regarding the proof of alcohol to be used for denaturation in certain formulas: "In accordance with the provisions of the second paragraph of Article 101, Regulations No. 61, it is hereby provided that alcohol of 192° proof may be used by proprietors of duly qualified denaturing plants in the manufacture of specially denatured alcohol formulas No. 39, 39-A, 39-B and 40."

RESEARCH WORK BY PHARMACISTS

The Scientific Section of the American Pharmaceutical Association has issued an appeal to workers in pharmacy, through Heber W. Youngken, chairman, and Arno Viehoever, secretary, for co-operation in obtaining a census of the scientific work carried on by pharmacists. The appeal reads:

"In order to obtain a census of scientific pharmaceutical research and to stimulate further work, the following recommendations were adopted by the Scientific Section at its last meeting. To ascertain the nature and extent of scientific work carried on by pharmacists, completed in 1921, and now in progress. To urge workers to carry on at least one piece of constructive work dealing with scientific pharmacy and publish the original or an abstract in the 'Journal of the American Pharmaceutical Association.'

"We cannot accomplish our task without the co-operation of those who are in a position to give it. Should the splendid 'Bibliography of Pharmaceutical Research,' published monthly, be incomplete in any particular, give us the missing data. Indicate the general nature of your studies in progress, so that duplication of work will be avoided, the scientific activity of pharmacists be more fully recognized, and new research be suggested. Do your part in solving at least one problem connected with pharmaceutical research. Prepare papers for publication, and at least one paper for presentation at the forthcoming meeting in Cleveland."

CHEMISTS GATHERING AT BIRMINGHAM

The American Chemical Society's meeting at Birmingham, Ala., April 3 to 7, will open at the Hotel Tutwiler with an address of welcome by Nathan L. Miller, lieutenant governor of Alabama, and response by Edgar F. Smith, president of the society. Speeches on the development of Southern industries will be made by C. P. Winslow, of the U. S. Forest Products Laboratory, Wm. H. Stone, of the "Manufacturers' Record", Theodore Swann, Van H. Manning, Charles L. Reese, W. C. Geer, W. D. Bigelow, and Francis P. Venable.

Marston T. Bogert will speak on "Perfumes, Natural and Synthetic," at the Southern Club, on Wednesday, April 5. Other speakers will be William H. Ross, C. B. Durgin, R. M. Jones, B. B. Ross, W. A. Peters, Jr., Clark S. Robinson, S. S. Heide.

The Division of Dye Chemistry meets on Thursday, April 6, when technical papers will be read by Max Phillips, S. Palkin, C. R. De Long, W. R. Watson, E. Emmet Reid and W. R. Waldron, Martin Meyer and Marston T. Bogert, Jules Bebie, Andrew J. Leddy, Walter C. Holmes, R. E. Rose, Henry R. Lee, and D. O. Jones.

CLOSE U. S. ALCOHOL PLANT IN CHICAGO

Pending an investigation to determine if the company has violated the alcohol laws, the Chicago plant of the United States Industrial Alcohol Co. was closed last week by the prohibition authorities. No charges have been filed against the company, the plant being closed arbitrarily by Federal Prohibition Director Charles A. Gregory of the Chicago district, while the investigation is in progress. Early this week, the closing order was revoked by the Commissioner in Washington and the plant reopened.

Gordon & Gordon, Chicago toilet goods manufacturer, have opened an office in New York under the direction of B. B. Stern, formerly manager of the Perfumery and Toilet Articles Division in the Bush Terminal Sales Building.

The Intermediate and Dye Market

Current Spot Quotations of Intermediates and Dyes, Pages 759-760

TEXTILE STRIKE HURTS DYE INDUSTRY

Intermediates, However, Are in Better Demand in Some Directions—Inquiries for Export Business Increasing—Rumors of Lower Prices on Aniline Oil Said to be Unfounded

PRICE CHANGES IN NEW YORK (Stocks in First Hands)

Advanced
No Advances
Declined
No Declines

Trend of the Market

	Today	Last Week	Last Month	Last Year
Benzene, C. P. ....gal.	\$.29	\$.29	\$.29	\$.27
Naphthalene, flake ....lb.	.07½	.07½	.07½	.08
Phenol .....lb.	.12	.12	.11½	.10
Xylene, 10 degrees.....gal.	.35	.35	.35	.45
Toluene, pure .....gal.	.30	.30	.30	.28
Aniline Oil .....lb.	.15½	.15½	.16	.20
Benzaldehyde .....lb.	.55	.55	.45	.45
Betanaphthol, dist. ....lb.	.28	.28	.28	.35
Paranitroaniline .....lb.	.77	.77	.77	.95
o-Toluidine .....lb.	.20	.20	.20	.25
Average	0.308	0.308	0.298	0.335

Improvement is noted in the spotty demand for intermediates in some directions although other factors state that the effect of the New England textile strike is being keenly felt in their products. Occasional export inquiries and increasing domestic demand for the more widely used intermediates have given the market a better tone. Price changes during the week were insignificant. Greater firmness is noted as sellers have abandoned their recent policy of cutting prices on the slightest provocation. Low prices rumored on aniline oil are entirely unfounded and appear to have existed only in the minds of buyers. The same appears to be true of other rumored reductions and buyers are beginning to realize this as they are forced to pay makers' asking prices when taking on stocks. Export inquiry for motor spirit grades of benzol is developing.

Coal Tar Crudes

Anthracene—Inactive. Refiners name 80-85% at 75c @ \$1.00 as to quantity and 40-45% at 12c@18c.

Benzene—Firm on continued scarcity of refined. Tanks, C.P., 29c and drums (extra) up to 34c. Tanks, 90%, 27c, and up to 32c in returnable drums. Export demand for motor fuel grades noted.

Naphthalene—Demand easy at recent levels. Refiners quote 7½c@8½c for flake and 8½c@9½c for balls. Outside sellers quote flake down to 6¾c.

Phenol—Firm but less active. Large drums at 12c lowest. Strictly prime white not below 14c.

Solvent Naphtha—Fairly active at 25c in tanks and up to 30c in returnable drums.

Toluene—Inactive at 30c in tanks and up to 35c in returnable drums.

Intermediates

Acid, 1, 2, 4—Inactive. Makers offer 80c@85c.

Acid, Gamma—Named as low as \$1.90. Buyers state that lower can be done but sellers refuse confirmation.

Acid, H—Some activity noted. Nothing less than

85c. Other sellers quote up to 95c as to brand and quantity.

Acid, Monosulfonic F—Scattering demand at \$2.30@ \$2.35 as to quantity.

Acid, Picramic—Makers name .65c@70c as to quantity on slow demand.

Acid, Sulfanilic—Absence of stocks enables makers to hold for 24c. Possibly this can be shaded for quantity business.

Aniline Oil—Firm at 15½c@16c in lots of ten drums and less. Rumors of cutting below this level are denied.

Aniline Salt—Makers hold for 24c for prime white crystals, but might weaken on large business.

Alpha-naphthylamine—Nothing better than 30c during the week. No cheap resale lots available at present.

Anthraquinone—Some inquiry. Makers name \$1.35 @ \$1.40 as to quantity for sublimed. The 25% paste is offered at 75c@80c as to quantity on a 100% basis.

Benzaldehyde—Technical firm at 55c in drums.

Beta-naphthol—Fair demand. Some export inquiry. Prices firm at 28c@30c as to quantity.

Chlorobenzene—Makers name 10c@14c as to quantity. Demand dead.

Chlorhydrin—Makers quote ethylene chlorhydrin in drums at \$1.50 and up to \$2.00 per pound for smaller lots.

Dimethylaniline—Held firm in spite of slow demand at 38c@40c in returnable drums.

Dinitrobenzene—Named at 21c@25c as to quality and brand from makers.

Diphenylamine—Makers' price held at 60c for quantity.

G Salt—Named at 70c firm by makers.

Meta-nitroaniline—Nothing better than 77c on quantity. Demand quite active.

Meta-phenylenediamine—Named at \$1.00@\$1.05 on fair demand.

Nitrobenzene—Redistilled weak at 10c in drums. No demand for technical.

Para-amidophenol—Base at \$1.25@\$1.35 as to grade. Hydrochloride at \$1.35@1.45 for technical and photographic. Demand slow and prices weak.

Para-nitroacetanilide—Inactive from makers at 55c for quantity.

Para-nitroaniline—Rumors of 75c are denied by makers. Best quoted, 77c and up to 80c as to quantity and brand. One maker names 78c as lowest.

Para-phenylenediamine—Firm at \$1.50@\$1.60 as to quantity. Fair demand.

Para-toluidine—Quoted at \$1.00@\$1.25 per pound as to maker and quantity. Generally inactive.

Resorcinol—Technical named at \$1.30@\$1.35 per pound. Demand slow, routine.

Coal Tar Dyes

No definite price changes have been announced, but all dye prices are tending to ease off on the inactivity of the cotton industry on account of strikes. The trade looks for early settlement, however, in view of the sea-

sonal demand for cotton fabrics which is due now. In spite of the dullness in buying, direct colors have not reacted as sharply as was expected.

Dyestuff Notes

Some factors in the trade look for prices on nitrite of soda around 10c or 11c within a short time and state that the present market is too low for profitable business. So far 9c@9½c as to seller is possible.

"Dyestuffs," National's house organ, in its March issue, calls attention, editorially, to the fallacy of the belief of many dye manufacturers that research which will enable us to make the dyes the Germans make is sufficient in itself. The need for study in unexplored fields of organic chemistry as a fundamental necessity of the American organic chemical industry is pointed out as the proper aim for research here.

Mail reports from London state that the intermediate market there is in about the same situation as it is here. Orders for quantity are few and far between, but small, scattered business is improving. Some export demand is noted there.

Inquiries are in the market for several large tonnage lots of motor spirit benzol for export. Exporters holding the orders are shopping the first hand market to get what seem to be impossible price concessions in view of the demand for the material here.

The manufacture of "tetralin" by the hydrogenation of naphthalene in the presence of a nickel catalyst has reached formidable proportions in Germany and its manufacture in other countries is being considered. "Tetralin" is used to a large extent as a motor fuel and turpentine substitute, and is produced in Germany to the extent of some 15 million gallons per annum.

DYE TRADE WITH CANADA GROWING

(Special to DRUG & CHEMICAL MARKETS)

Toronto, Canada, March 29.—The monthly report of the trade of Canada for January gives the value of imports and dyes and tanning materials as follows: From Britain, \$26,885; United States, \$234,772; other countries, \$90,313; total, \$351,970; compared with imports from Britain, \$51,473; United States, \$158,299; other countries, \$106,807; total, \$316,579 during January, 1921.

Imports of aniline and coal tar dyes included in the above were: From Britain, 16,390 lbs., value \$21,663; United States, 121,110 lbs., value \$108,346; Germany, 7,862 lbs., value \$56,110; Switzerland, 10,549 lbs., value \$11,439; other countries, 14,674 lbs., value \$20,064; total 173,585 lbs., value \$217,622; compared with imports for January, 1921, from Britain, 12,788 lbs., value \$13,706; United States 44,911 lbs., value \$61,635; Germany, 331 lbs., value \$861; Switzerland, 5,284 lbs., value \$5,044; total 63,314 lbs., value \$81,246.

As part of the service which the National Aniline & Chemical Co., Inc., renders to the users of its dyes, a color card issued especially for the hat trade, entitled "Mode Shades on Fur Felt" which contains several new features of substantial interest and use to hat manufacturers, has just been issued. On the first page general dyeing directions are given and a sample piece of the material used in the subsequent dyed samples is shown. Then follow a series of forty-eight mode shades and against each one is given the combination of dyes used, indicating the percentages required and the composition of the acid bath employed.

SOURCES OF TANNING MATERIALS

Tanning materials, natural dyes and extracts are discussed in the fifth annual report of the U. S. Tariff Commission. The report says in part:

"The American tanneries, previous to 1900, obtained practically their entire supply of tanning materials from domestic sources—nearly all hemlock and oak. As the virgin forests of these products were becoming exhausted, chestnut extract, made from chestnut wood of abundant growth in the Appalachian region, was accepted, and the production of this extract has since become highly developed in that area.

"Since 1900 a large import trade has developed in foreign tanning materials from many parts of the world to replace the insufficient supply of oak and hemlock and to obtain cheaper tanning agents. These include woods, leaves, barks, fruits, nuts, pods and other vegetable materials, with the extracts made by hot-water treatment of these products, with subsequent evaporation. The important tanning materials imported include: Quebracho, mangrove, myrobalans, sumac, divi-divi, valonia, wattle and gambier.

Chestnut-wood extract is the most important domestic tanning agent and is available in quantities in excess of domestic needs. The chestnut blight at present threatens the entire stand of chestnut, which will have a tendency to accelerate the rate of cutting. The annual cut of hemlock and oak barks is decreasing. At the present rate of consumption it is estimated that the supply of these barks will be exhausted in about forty years. This does not include the western hemlock of Oregon and Washington, which offers a large future supply of bark, utilized at present only to a small extent.

"Natural dyes, previous to the introduction of coal-tar dyes, served as a basis of dyeing. Although synthetic dyes have largely displaced them, the natural dyes are in demand for certain uses, chiefly in the textile and leather trades. Certain natural dyes, extracts of logwood, fustic and redwood, are made in this country from woods imported from the West Indies and Central and South America. The manufacture of dye-wood extracts is a highly developed domestic industry. In addition, many dyes prepared from foreign vegetable sources are imported ready for use into the United States. These dyes include cutch, archil and cudbear, natural indigo, saffron, safflower, cochineal, turmeric, annatto, litmus, chlorophyll extract, madder and Persian berries. Quercitron and osage orange (the latter of more recent development) are the important natural dyes. Imported fustic is competitive with these products for certain uses."

The National Aniline & Chemical Co. has announced Sulphur Black BG Extra Conc. It is the greenest shade of sulphur black yet produced, and is adaptable for dyeing raw stock, piece goods, and yarns in all types of machines.

The Ultra-Marine Co., 539 Twenty-second street, Huntington, W. Va., E. C. Baugher, in charge, is completing plans for a plant at Cincinnati, and will soon take bids.

The United States Color & Pigment Co., Evergreen avenue, Newark, N. J., has had plans prepared for an addition to its plant to cost about \$25,000.

Jayne & Sidebottom have been appointed selling agents for the Colorlake Chemical Co., of New York.

E. A. Widman is acting as sales manager for H. A. Metz & Co., Inc.

The Oil Market

Current Spot Quotations of Oils, Tallows, Greases, Page 762, Naval Stores, Page 763

BUSINESS IN VEGETABLE OILS LIGHT

Crushers Announce a Reduction in Linseed Oil—Cottonseed Oil Easier on Lack of Interest of Consumers—Good Demand for Animal Oils—Fish Oils Scarce and Higher

PRICE CHANGES IN NEW YORK

(Stocks in First Hands)

Advanced

Turpentine, 1c gal.

Declined

Linseed, 1c gal.

Cottonseed, 1/4c lb.

Trend of the Market

	Today	Last Week	Last Month	Last Year
Cod Oil, N. F.	\$.57	\$.57	\$.55	\$.50
Degras, American, bbls.	.03 3/4	.03 3/4	.03 3/4	.05
Lard, No. 1	.65	.65	.65	.75
Menhaden, crd.* bbls.	.42	.42	.42	.28
Neatsfoot, 20 deg. ct., gal.	1.32	1.32	1.32	1.15
Red Oil, distilled	.08 3/4	.08 3/4	.07 3/4	.07 1/2
Stearic Acid, T. F.	.10 1/2	.10 1/2	.10 1/2	.13
Coconut, Ceylon, Dom., bbls.	.49	.49	.08 1/2	.09 3/4
Cottonseed, crude, tanks	.10	.10 1/4	.10	.01
Linseed, Carlots, bbls.	.79	.80	.86	.65
Olive, denatured	1.12	1.12	1.10	1.60
Peanut, refined	.13	.13	.11	.10 1/2
Soya Bean, bbls.	.10 1/4	.10 1/4	.09	.07
Average	.419	.420	.419	.423

Business in oils dragged slightly during the week and has failed to come up to expectations based on the activity of recent weeks. Consuming buyers are not showing the increased interest hoped for and on this basis speculators are losing some of their enthusiasm. The market is far from weak yet, but there is much less actual business being put through. Prices have not changed appreciably. Crushers announce a reduction on linseed oil. Cottonseed oil is easier on lack of interest and prices are quoted slightly lower. Animal oils are in increasingly better request and prices are working to firmer positions. Fish oils continue comparatively scarce, and firm on this account. Naval stores business has been limited, but higher prices are announced for turpentine on the spot.

Vegetable Oils

Linseed Oil—Imported oil has been a decidedly up-setting factor in the market here. Crushers quote lower at 79c in carlots of barrels. Imported oil offered at 72c spot and 70c shipment landed. Domestic prices rule weak although no definite confirmation was to be had of prices below 79c. London quotations firmer at 37s 3d per quintal. Antwerp quotes 182 francs per 100 kilos.

Buenos Aires flaxseed lower at \$1.84 1/2 per bushel. Duluth easier at \$2.48@2.50. Winnipeg lower at \$2.27@2.30 per bushel.

Castor Oil—No change from 11 1/2c@12c for No. 1 in barrels and cases and 10 1/2c for No. 3 from crushers. Odd lots of No. 3 reported at 10c.

China Wood Oil—Spot position a trifle easier with 14c possible for barrels. Generally quoted at 14 1/4c and up as to quantity. Coast largely nominal at 13c; arrivals there as low as 11 1/2c. Shipment, f. o. b. N. Y., from the Orient as low as 11 1/2c for futures.

Coconut Oil—Generally easier with prices subject to shading. Ceylon barrels are easy at 9c@9 1/2c spot. Cochin barrels spot, 9 3/4c@10c. Manila in sellers' tanks, Coast, dull at 7 3/4c.

Corn Oil—Holding fairly firm at recent prices in spite of waning interest. Crude, tanks, mills, 10c@10 1/4c; barrels 11 1/2c. Edible spot barrels, 13c.

Cottonseed Oil—Interest lagging as consumers fail to buy. Crude sales at 10c f. o. b. mills in buyers' tanks. Prime summer yellow easier at 11 1/2c@11 3/4c March to September; October, 10 7/8c@11c.

Olive Oil—Denatured, barrels, spot \$1.12. Foots can be had in limited quantity at 9c@9 1/4c spot. Shipment firmer at 9c.

Palm Oil—Lagos easy at 8 1/4c@8 1/2c in casks spot. Bonny old Calabar. 7 3/4c@7 3/4c in casks, spot. Niger, 6 1/2c@6 3/4c.

Palm Kernel Oil—English from spot stocks steady at 8 3/4c@9c.

Peanut Oil—Prices holding well at recent advance in spite of slow demand. Crude, at mills, buyers' tanks, 10 1/2c@10 3/4c. Oriental, sellers' tanks, Coast, 11 3/4c@12 1/4c. Spot refined oil, 12 1/2c@13c in barrels. Crude on the spot scarce at 11 1/2c.

Perilla Oil—Nothing better than 12c is possible for spot or nearby arrival. Futures for late arrival as low as 11c landed very firm.

Rapeseed Oil—Refined oil steady at 83c@85c in barrels spot. Blown at 92c@95c per 8 lb. gallon as to viscosity.

Sesame Oil—Routine trading in domestic at \$1.15 @ \$1.20 as to quantity.

Soya Bean Oil—Stocks on the Coast are still small. Prices firm at 9 1/4c in sellers' tanks, Coast, and 6 1/2c@6 3/4c bulk in bond. Spot barrels at 10 1/2c. Edible spot 11 1/2c@12 1/4c.

Animal Oils

Degras—American at 3 3/4c@4c in barrels and English at 4c@4 1/4c. Fair movement. Neutral degas 6c @7c as to seller and quantity.

Lard Oil—Prime technical lard oil at 85c@90c as to seller. Edible prime \$1.15. No. 1 lard oil 65c@72c in barrels as to seller. No. 2, 63c@70c in barrels as to quantity and brand.

Oleo Oil—Slightly firmer at 11 1/4c for No. 1 and 10 1/4c for No. 2. No. 3 nominal at 9c.

Red Oil—Firmer at 8 1/2c@9c for either distilled or saponified.

Fish Oils

Cod Oil—Still tight with stocks low. Lowest price 57c in barrels, others quote up to 60c. Primary stocks light.

Menhaden Oil—No first grade crude to be had in quantity. Scattered lots nominal at 42c in tanks, Jacksonville. Baltimore stocks exhausted. Refined grades steady with sellers at variance. Price basis for refined is 53c@58c for light strained as to brand.

Whale Oil—Unchanged. Natural winter at 70c and bleached winter at 75c.

Naval Stores

Rosin—Prices unchanged on slow demand. Range from \$5.15 per barrel for B to \$7.50 for WW.

Turpentine—Some sellers quote 87 1/2c; others 87c. Savannah prices higher and firm at 81 3/4c. London easy at 67s per quintal.

Oil Trade Notes

Olive foots remain very firm with present and nearby stocks very hard to locate.

Soya bean oil is attracting more attention on the Coast where stocks are very short.

The Olive Oil Association of America will hold its second annual meeting at the Hotel Biltmore, New York, Tuesday, April 4.

The Portland Vegetable Oil Mills, Portland, Ore., have plans under way for a plant for the manufacture of turpentine and rosin. H. H. Ward heads the company. W. H. Curtis and L. H. Russe, Portland, are engineers.

The Sherwin Williams Co., Cleveland O., has recently issued a very attractive booklet called the "Home Painting Manual." It is profusely illustrated in colors, and contains, besides directions for painting, varnishing, staining, etc., many suggestions of attractive color combinations for use in the home. The cost is nominal.

Peanut oil has advanced rapidly in the past few weeks and peanuts have become very scarce in the South. Evidences of speculative activity in peanuts are reported in Alabama and Georgia but no considerable stocks were brought to light there. Exports of peanut oil during 1921 totaled 1,700,000 pounds against 3,000,000 pounds imported.

E. C. Bisbee and A. L. Bisbee, formerly vice president and secretary, respectively, of the Midland Linseed Products Co., Minneapolis, have severed their active connection with that firm and contemplate erecting a linseed crushing plant in the East. Both retain stock interests in the Midland company. Their successors have not yet been named.

Linseed oil crushers are feeling keenly the effect of the heavy imports of linseed oil during recent weeks. Some consumers are going so far as to request that deliveries on contracts be delayed so that they can take advantage of the low prices at which importers offer oil here. Several bulk shiploads have come in so far.

Trading in cottonseed oil has amounted to little during the week as speculators realize that they have failed to stimulate a real purchasing movement by playing up the prospective and present shortage of oil. It is a significant fact that the October position of prime summer yellow is quoted a full cent under the nearer months on account of the prospect of some new oil by that time.

Six new members were elected at the meeting of the board of directors of the Oil Trades Association of New York last week. Those elected were: W. J. Cassidy, American Cotton Oil Co.; Emile F. Kick, American Chemical Products Co., Newark, N. J.; A. H. Horner, C. B. Peter Co.; Chas. F. Faas, Oil States Petroleum Co.; S. L. Bushman, Metal Package Co., and H. Robinson, Netherlands Chemical Co.

Malcolm McKenzie, formerly connected with an essential oil house in New York, and H. H. Foster, until recently an officer of a firm of importers and exporters, have formed a corporation to be known as McKenzie & Foster, Inc., located at 82 Beaver st., New York, where they will conduct a general commission business, confining themselves largely to Far Eastern products. Mr. McKenzie contemplates an extensive trip embracing Japan, China, Philippine Islands, Java, Straits Settlements, Ceylon and India.

PRODUCTION OF WHALE OIL

Whale oil production gradually increased up to the time of the war, but went into a slump then from which it has not recovered. The development of the Antarctic Ocean as a source of whales was not begun until 1909, when 29 vessels produced an average of 3,860 barrels each. The Norwegian whalers have been particularly active in this field, and in 1912, 440,000 barrels were obtained from this source out of a total Norwegian catch of 482,000 barrels. The world's production of whale oil in 1912 was 760,000 barrels, and in 1913, 780,000 barrels, of which the Norwegian catch was 590,000 barrels. The world's production dropped to 380,000 barrels in 1917, and even less in 1918. The 1920 production rose on advancing prices to 424,000 barrels. So far there has been no appreciable improvement in the catch.

Walter J. Hund, a San Francisco chemist, has perfected a process for utilizing redwood stumpage in a commercial way and thus clearing the way for reclaiming large acreages which have been logged over. Redwood stump wood is very rich in resinous matter, whose tar acid or phenol content exceeds that of other commercial tars. Through a system of distillation the tar is easily obtained, Mr. Hund reports. Plans are now being made for the establishment of several plants in the redwood districts. Wood alcohol, acetate of lime, acetone and charcoal are among the products sought.

The Paint and Varnish Division of E. I. duPont de Nemours & Company has begun the publication of "The Paint Pot". It is a service publication devoted to the interests of dealers who handle this line of DuPont products. The editor announces that it will do its part to make 1922 the greatest paint and varnish year in the history of the business. It is aimed to publish in "The Paint Pot," all phases of practical information which will enable dealers to build better business. The program includes articles on promotion work, novel selling schemes, suggestions for seasonal sales campaigns, new uses for paint and varnish products, manufacturing processes, store and stock and window arrangement.

The new plant of the Cook Nut Corp., Baltimore, will be in operation in May, for the production of lard substitutes, cooking and salad oils. The output will be 60,000 lbs. of finished products daily. The buildings are one, two and three stories, housing the refining and refrigerating machinery, packing, storage and cooperage departments, and a 30,000 gallon tank for water supply and fire protection. The buildings are steel and concrete.

The Department of Justice, Washington, D. C., filed in the Supreme Court its appeal from the decision of Judge Carpenter of the Federal Court, Chicago, in favor of the linseed oil manufacturers who were accused by the government of having violated the anti-trust law. The suit is against the American Linseed Oil Co., the Armstrong Bureau of Related Industries and other companies.

The second annual convention of the Olive Oil Association of America will be held at the Hotel Biltmore on Tuesday, April 4. The officers of the association are: President, R. V. Delapenha; vice president, L. J. Scaramelli; treasurer, G. F. Romeo, and secretary, C. A. Tosi.

The Crude Drug Market

Current Spot Quotations of Crude Drugs, Pages 764-765

BUYING MOVEMENT IN BOTANICALS

Agar Agar Higher on Spot Scarcity—Celery Seed Up—Saffron at \$26—Nux Vomica Lower—Licorice Bundles Weaken—Selected Elm Bark Under Pressure—Cuttlefish Easier

PRICE CHANGES IN NEW YORK

(Stocks in First Hands)

Advanced

Agar Agar, No. 1, 15c lb. Fennel Seed, French, 1/4c lb.
No. 3, 5c lb. Fenugreek Seed, 1/4c lb.
Celery Seed, 1/4c lb. Mace, Batavia, 1c lb.
Gamboge, 15c lb. Nutmegs, 1c lb.

Declined

Cuttlefish Bone, Jew., 10c lb. Olibanum Sift., 1/4c lb.
Nux Vomica, Powd., 1c lb. Tragacanth, No. 1, 10c lb.
Tamarinds, Bbls., 1/4c lb. Corn Silk, 1/4c lb.
Balsam Oregon, 15c gal. Licorice, Bndls., 3c lb.
Elm Bark, Sel., 1c lb. Ginger, Cochin, 1/4c lb.

Trend of the Market

	Today	Last Week	Last Month	Last Year
Aconite Root, U.S.P.	\$.22	\$.22	\$.22	\$.30
Buchu Leaves, Short	.95	.95	.95	1.30
Cantharides, Russian	2.50	2.50	2.50	2.50
Cocculus Indicus	.05	.05	.05	.18
Ergot, Spanish	1.00	1.00	1.00	.75
Insect Powder, pure	.55	.55	.60	.45
Ipecac, Cartagena, powd.	2.00	2.00	1.85	2.65
Nux Vomica	.08	.08	.08	.11
Opium, gum	5.50	5.50	5.50	6.00
Rhubarb Root, H. D.	.85	.85	.75	.43
Tragacanth, No. 1, ribbon	2.15	2.25	2.25	3.75
Wild Cherry Bk. thin nat.	.09	.09	.09	.10
Average	1.38	1.39	1.36	1.54

Somewhat of an expansion in crude drug buying was indicated during the early part of this week. Demand was confined quite closely to seasonal items. Prices are generally in a firm position with the usual number of ups and downs fairly well divided. The strong seed situation is still marked by reduced spot stocks. Fenugreek seed is firmer. Celery is higher. All grades of agar agar are up on scarcity here. Spanish saffron reached \$26. Nux vomica is soft and powdered is lower. Selected licorice bundles are easier. Elm bark bundles are under pressure. Cochin ginger is easier.

Crude Drugs

Agar Agar—Stocks all grades agar agar spot very small and sharply higher prices demanded. A good number one named at \$1.00@1.10 pound; No. 2 is held at 80c@90c; No. 3 at 58c@65c.

Cantharides—Russian whole offered \$2.50 spot. Powdered \$2.65. Chinese very scarce, one holder, \$1.15; powder \$1.25.

Cuttlefish Bone—Jewelers' cheaper here at 60c@70c as to grade large and small. Common Trieste 18c, powder 14c.

Ergot—Situation spot uncertain. Bags Spanish \$1.00 now inside. Small sales \$1.02. Negotiations for shipment of Russian ergot to this market via Hamburg.

Lycopodium—Firmer for shipment. Direct importers name \$1.10 spot, 22 pound boxes. Lots available \$1.05.

Nux Vomica—Spot buttons 6c ton lots, 8c less. Powder easier 11c U. S. P. barrels. Replacement buttons 5 1/2c.

Balsams—Oregon balsam fir easier here \$1.25 gallon

barrels. Peru scarce \$2.25. Tolu strong 50c@60c pound.

Barks

Buckthorn—Spot 6 1/2c. Easy and unchanged.

Cascara Sagrada—Better demand. In big way, 1921 peel, spot 10c. Other lots as to age 11c up to 15c.

Elm—Continues weak as new peel is close by. Spot selected bundles in small demand at 25c pound.

Flowers

Insect—The influence of cheaper flowers and a slower demand has further softened insect powder although prices are unchanged. Dalmatian for shipment Trieste 36c c. i. f. Japanese crop poor quality samples seen here. Pure powder spot barrels 55c@60c pound, some sellers still holding for the latter.

Saffron—Spot holders here now inside at \$26.00 1 pound tins Spanish. This is an advance of \$2. Demand naturally confined to small lots. American saffron \$1.10 pound spot.

Gums

Gamboge firmer sales at \$1.15 whole. Olibanum easier, sorts 9c; tears as to color 13c up to 18c. Tragacanth, No. 1 ribbons, \$2.10@2.20 pound cases. Curacao aloes firm 7 1/2c cases.

Leaves and Herbs

Buchu—Old crop spot short leaf here are not large and routine sales are being made without difficulty at 95c bales. For shipment Cape Town, 70c c. i. f. is named. Goods afloat, 75c c. i. f. to arrive.

Corn Silk—Easier 5 1/2c small way. Larger lots 5c spot.

Senna—Half leaf Alex generally 15c spot 350 pound bales. A broker claims 14c can be done.

Roots

Calamus—Little or nothing of genuine bleached available here. Nominally 50c unchanged.

Dandelion—Easy spot 8c imported. To replace abroad 6c.

Ipecac—Two lots spot Rio offered \$1.90 and \$2.00. Cartagena in a small way at \$1.75 whole and \$2.00 powder. Imports last week, 18 bags Cartagena.

Licorice—Ten pound select bundles easier spot 22c. Baby bundles 28c unchanged.

Rhubarb—Import 15 cases last week from Hamburg. Whole 80c, powder \$1.00 barrels spot. Practically nominal. Good stocks en route.

Senega—Spot \$1.00. A broker reports 95c can be done, but it is doubtful.

Seeds and Spices

Celery—Sales Tuesday 18 1/2c spot round lots. Now inside at 19c bags.

Fenugreek—Firmer whole spot 3 1/2c. Powder 5c@6c as to quantity.

Poppy—Spot Dutch still 14 1/2c. Shipment 15c.

Ginger—Cochin lemon and ABC easier again 10c@10 1/2c spot.

President Obregon, of Mexico, has issued a decree revoking the decree by which the tariff on drugs, pharmaceuticals and chemicals was increased fifty per cent on Jan. 15, of this year.

Crude Drug Notes

Ernest L. Melfi's plant for making face powder, at Providence, R. I., was destroyed by fire on March 15.

McLaughlin, Gormley, King Co., crude drug millers, will move their New York office to 75 Fulton street on April 1.

Reports here indicate that German interests are preparing to market Russian ergot in the American market and are now lining up their connections here.

Owing to the low price which is now ruling for selected elm bark, the country gatherers do not appear over-anxious to collect and sort the goods this year.

Importers are now using turpentine, oil rosemary, and similar products to "denature" Sumatra benzoin imports so that they cannot be used for U. S. P. purposes and so that they can get by the Customs House. Only U. S. P. gum can be brought in for medicinal use.

Among the imports last week, several items of interest to crude drug consumers were noted, including 505 cases Curacao aloes, 72 bales of stramonium leaves from Hamburg, 18 bags of ipecac from Cartagena, 387 bags Dutch poppy seed from Rotterdam, and 15 cases of rhubarb from Hamburg.

The monthly report of the Trade of Canada shows imports during January of drugs, medicinal and pharmaceutical preparations as follows: From Britain, \$69,426; United States, \$82,053; other countries, \$29,227; total \$180,706; compared with imports from Britain valued at \$83,418, United States, \$90,698, other countries, \$25,090; total \$199,206 for January, 1921.

Cannabis Indica will be absolutely prohibited transportation from one state to another if H. R. 10738, introduced by Congressman Hayden of Arizona, and now in the Judiciary Committee, becomes a law. The bill prohibits interstate transportation without any exceptions. Hearings will be held next month, at which the drug and medical associations of the country will fight the measure. For a first offense, the bill provides a penalty of 60 days minimum and one year maximum in jail, or \$100 to \$500 fine.

NEW NARCOTIC FORM DISCUSSED

(Special to DRUG & CHEMICAL MARKETS)

Washington, D. C., March 29.—A hearing was held last week in the narcotic section of the Prohibition Unit of the Bureau of Internal Revenue on a new form proposed by the narcotic section which is smaller than that now in use. The new form met with considerable objection by the representatives of various trade bodies among whom were W. L. Crounse, of the National Wholesale Druggists' Association; Mr. Woodruff, of the American Drug Manufacturers' Association; E. C. Brokmeyer, of the National Association of Retail Druggists; Mr. Pratt, of the American Association of Pharmaceutical Chemists; Martin J. Gallagher of the Proprietary Association, and Mr. Bevens, of McKesson and Robbins, wholesale druggists, New York.

Another form in lieu of that in use at present was proposed by Mr. Bevens that would change the entire method of making returns in effect and as proposed by the narcotic section in connection with checking up the manufacture and distribution of narcotics. This was favored by the representatives of the trade present.

Business Brevities

B. M. Spencer, of Litter & Allen, has returned from a vacation in the South.

The Ultro Chemical Corp., 226 40th street, Brooklyn, manufacturers of dyes, whose plant was damaged by fire March 22, carried insurance of \$40,000.

George Ashworth, of the New York office of the Dow Chemical Co., has returned to his desk after a week's illness.

Henry Hasbrouck, for sixteen years with John Carle & Sons and more recently southern representative of E. Fougera & Co., died at his home, 552 West 185th street, New York, March 23.

The Celluloid Co. reports for 1921 a deficit of \$1,146,239, after allowing for depreciation, inventory reduction, taxes and other charges. In 1920 the company had a net income of \$1,072,413.

New York State Department of Labor reports show a reduction in average earnings in the chemicals, oils, and paints group in February compared with January. The leather tanning industry reported the only increase in average earnings.

Charles Pope, a wealthy manufacturer of glucose, died in Chicago, on March 26. Mr. Pope attracted considerable attention in 1914, when he sold his beet sugar refining plants at Geneva, Ill., and Venice, Ill., to the Corn Products Refining Company for \$3,000,000.

Louis Spindler, foreign manager of the Lambert Pharmaceutical Co., St. Louis, has established a laboratory for making Listerine with Sanborn Brothers, Mexico City, Mexico, and will supply the Republic of Mexico from that point.

"America's Unknown Hero", is the title of a booklet published by the Alonzo O. Bliss Medical Co., Washington, D. C., and now being distributed in the trade. It gives full details concerning the honors paid to the "unknown" dead who were buried overseas.

The baking powder business of I. A. Folger & Co., San Francisco, has been purchased by A. Schilling & Co., manufacturers of cream of tartar baking powder. William Neuberg, 6 Cliff st., New York, importer of cream of tartar and tartaric acid, was active in bringing about the consolidation.

The directors of the Corn Products Refining Co. have declared the regular quarterly dividends of 1 per cent on the common stock and the usual extra of $\frac{1}{2}$ of 1 per cent on the common, payable April 20 to holders of record April 3 and the regular quarterly dividend of $\frac{1}{4}$ per cent on the preferred, payable April 15 to holders of record April 3.

Ernest A. S. Zillesen, president of the Liberty By-Products Works, Passaic, whose plant was seized last week by Federal Prohibition agents, says the section of the plant where a still was found had been abandoned by the company in preparation for moving to a new plant at Belleville, N. J., and he knew nothing about the still. A. D. Washington, secretary, says that A. J. Naab, who was arrested at the time, was not employed by the Liberty By-Products Works.

The Essential Oil Market

Current Spot Quotations of Essential Oils and Aromatic Pages 767-768

HIGHER PRICES FOR OIL PEPPERMINT

Spot Advance Follows—Stronger Mid-West Market—
Lemon Up Again as Buyers Come in—West Indian
Orange Higher—Caraway and Spearmint Advanced
—Bergamot Softer

PRICE CHANGES IN NEW YORK (Stocks in First Hands)

Advanced	
Oil Caraway, Rect., 25c lb.	Oil Orange, W.I., 25c lb.
Oil Hemlock, 5c lb.	Bitter, 25c lb.
Oil Nutmeg, 10c lb.	Oil Spearmint, 15c lb.
Oil Spruce, 5c lb.	Oil Tansy, \$1 lb.
	Oil Wormwood, 50c lb.
Declined	
Oil Bergamot, 10c lb.	Oil Wormseed, 15c lb.
Oil Cade, 10c lb.	

Trend of the Market

	Today	Last Week	Last Month	Last Year
Oil Bergamot	\$4.90	\$5.00	\$5.00	\$5.50
Oil Citronella, Ceylon .....	.55	.55	.55	.35
Oil Cloves	2.15	2.15	2.15	1.30
Oil Lemon .....	.85	.85	.75	.80
Oil Peppermint, Natural	1.70	1.70	1.70	3.25
Oil Sandalwood, E. I.	7.25	7.25	7.10	8.50
Oil Sassafras, Artif. ....	.46	.46	.33	.65
Benzaldehyde, U.S.P.	1.40	1.40	1.40	1.00
Coumarin	3.15	3.15	3.25	4.00
Methyl Salicylate, Cans .....	.35	.35	.35	.40
Vanillin .....	.55	.55	.55	.60
Average	2.15	2.16	2.15	2.98

Routine activity only has characterized the trading in essential oils during the week. Prices as a group are steady with the tendency to creep up more pronounced than the weak element. Revisions have not been numerous. Lemon oil has turned active at higher prices. Caraway has advanced again. West Indian orange is higher on spot. A firmer position is noted for peppermint. Spearmint has also strengthened. Tansy is up again. Spruce is firmer. Wormseed oil is weaker. Bergamot is soft. Oil cade is easier.

Essential Oils

Oil Anise—Quiet and dull at 50c tech. spot and 60c U.S.P.

Oil Bergamot—Has eased off slightly to \$4.90, possibly \$4.80 spot on a quantity. Easier for shipment from Sicily.

Oil Cade—Has softened to 50c@60c lb. spot.

Oil Caraway—Higher again on spot at \$2.25 lb. rectified. Import cost up on advanced shipment from Holland.

Oil Cassia—U.S.P. spot \$1.60 lb. Market for tech. a nominal affair owing to Govt. technicalities. \$1.20 @ \$1.30 when sold on affidavit.

Oil Citronella—Imports last week 37 drums from Colombo at New York. Price firmly maintained at 55c drums spot, 56c cans. Demand steady. Spot stocks limited.

Oil Cloves—Quiet. Spice uncertain at 31½c spot bales. Oil quoted distillers unchanged \$2.15 lb. cans.

Oil Cumin—Oil \$4.75@\$5.00 lb. spot. Morocco seed has tripled in price within the past eight weeks while oil has been unchanged. Looks up.

Oil Eucalyptus—Spot cases selling sparingly 38c U.S.P. Australian. Position here weak and unsupported. Demand very small.

Oil Geranium—Bourbon steady \$5.00@\$5.25 lb. spot prime goods. African practically nominal at \$8.00 lb. for genuine. Turkish dull, little to be had here, \$4.25.

Oil Hemlock—Firmer at 85c spot. Little offered from country. The low price has discouraged manufacture.

Oil Lavender—Most sellers inside \$3.25 U.S.P. spot flower oil, but \$3.00 can still be done although quality is unknown. Cost equals \$3.25@\$3.50 to replace abroad. Aspic 85c spot.

Oil Lemon—After dropping off to 75c last week, at which level some buying was done here, increase in activity found sellers moving up to 77½c and 80c. Monday, the price went to 85c inside spot, one lot of fifty cases at 82c having been cleaned out. Holders of some brands continued to ask 95c. Stocks of lemon still held by speculators here which were bought at 90c. Import at 75c c. i. f. shipment.

Oil Nutmeg—Reflecting the firmer position raw material, oil nutmeg is higher at \$1.10 lb. inside spot.

Oil Orange—West Indian again higher and in limited supply on spot. Now quoted \$2.60@\$2.70 cases. Imports last week 30 cases from Kingston. Shippers views very firm. Sicilian oil coppers spot \$3.00 now best and firmer thereat.

Oil Peppermint—Low priced holders on spot advanced prices for peppermint on Monday to an inside of \$1.80 natural and \$2.00 for U.S.P., a jump of 10c. Mid-west distillers are higher for shipment at \$1.67½ f. o. b. Some spot sellers are holding at \$2.00 for natural and \$2.20 for U.S.P. Better demand for export.

Oil Sandalwood—Firmly held at \$7.25 lb. spot cases U.S.P. East Indian oil.

Oil Sassafras—Artificial continues easy at 46c makers' sixty lb. cans. Natural unchanged 90c cans.

Oil Spearmint—Stronger spot position, \$2.25 seller having jumped to \$2.40 spot. Held generally \$2.40@\$2.50 lb.

Oil Tansy—What little oil is available is held sharply higher here at \$9.00 lb.

Oil Wormseed—Weaker position spot at \$3.85@\$4.00 lb. Demand slow and pressure on prices noted.

Oil Wormwood—Firmer spot at \$11.75@\$12.00 lb. spot. Most sellers inside \$12.00.

Aromatic Chemicals

Benzaldehyde—Best from manufacturers \$1.40 U.S.P. Nothing known under this here.

Coumarin—Reported moving well. Manufacturers supplying consuming trades at \$3.15@\$3.25 lb. No outside stocks available.

Menthol—Firm at \$6.25 cases spot. Less cases \$6.40.

Methyl Salicylate—Makers at 37c 100 lbs., 50 lb. cans. Resale 35c fifty lb. cans.

Vanillin—Moving steadily from makers at 55c oz. 1,000 oz. lots. A small resale lot still held here 54c.

The Chicago Perfumery, Soap, and Extract Association met on Wednesday, March 29, at the Elk's Club, with bowling as a feature of the entertainment.

Essential Oil Notes

Present low priced sellers on oil peppermint in New York are apparently below replacement cost in the Mid-West where, communications indicate, holders are naming \$1.65 and \$1.67½ f. o. b.

Lack of interest in oil lemon at this season of the year is difficult to explain, particularly with replacement costs based on Sicilian quotations for shipment, standing equal to this market.

In connection with the recent purchase of the Paris "Figaro" by Coty, the perfumer, it is interesting to note that E. Charabot of Hughes Aine, Grasse, and Leon Givaudan of Givaudan & Co., Geneva, were selected for the Board of Directors.

The following has just been received by DRUG & CHEMICAL MARKETS from its representative in Vera Cruz: "The entire crop of vanilla beans in the Papantla and Gutierrez Zamora districts is sold. The price at the plantations is \$7.50 American currency, for the whole vanilla beans and \$6.00 for cuts. Practically all the vanilla exported from this port in the past 60 days has been "cuts" of the 1921 and 1922 crop, as the cuts cure faster than the whole beans. In about one month the exporters will start shipping the whole vanilla beans. The new crop for 1922 and 1923 can not be estimated until the last of April or middle of May, a great deal depends on the rains during these months, a continued drought will cause the flowers to fall, which may mean another short crop and higher prices."

ONE VAST STOREHOUSE FOR ALL WHISKEY

(Special to DRUG & CHEMICAL MARKETS)

Washington, D. C., March 29.—A huge monument to prohibition is proposed by the owners of 80 per cent of the nation's supply of bonded whiskey. These stocks total 100,000 barrels and are estimated to last for 10 years at the present rate of consumption. The total cost of this immense volume of distilled spirits to the present possessors, the 500 members of the Warehouse Receipt Owners' Association of America, was in round numbers \$7,200,000 figured at \$1.50 per gallon, not inclusive of tax and accrued charges which would more than double that sum. The total cost to the man on the street as dispensed by the retail druggist at \$3 per pint on a physician's prescription would be \$115,200,000.

This monument—a huge fireproof warehouse—is located in St. Louis. It is two city blocks long and one block wide and is the first of probably half a dozen great bonded warehouses in which will be concentrated the total available supply of bonded whiskey. The building has a capacity for the storage and bottling in bond of 18,000 barrels. It was constructed by the Garrett Wine Co. at a cost of \$500,000 to be used by that concern as a distributing point for its wine in the Southwest, but prohibition subsequently converted it into an empty hulk of steel and concrete. Construction was finished in 1920.

Tentative arrangements have been made to lease the building by the Security Warehouse & Investment Co., a corporation organized by the Missouri law by the Association of Warehouse Receipt Owners. The association and the corporation are one and the same. The proposition has been advanced under the provision in an amendment to the present law carried as a rider on the bill providing appropriations for the Treasury Department for the fiscal year ending June 30, 1923.

MORE ACTIVITY IN LEMON OIL

(Special Correspondence to DRUG & CHEMICAL MARKETS)

Milan, Italy, March 18.—The market for essential oils has shown greater activity, but at the end of February there was a period of dullness. A good demand for lemon essence of old production as well as for new production has sprung up. The lemon essence of new production has risen from lire 7.60 to lire 9 and lire 9.50 per pound. It closed at the end of February at lire 8.50 and lire 8.75. The co-operative Society "SCIA," at a meeting of the Board of Directors confirmed the plan of co-operation, but believing that some changes were necessary, the meeting decided to appoint a commission charged to study the modifications which are to be made in the by-laws of the society in order to secure more energetic and profitable management.

During the first days of February the price of lemon oil rose from lire 7.60 to lire 9 per pound, and even to lire 9.50. During the last ten days of February there was no improvement, the price being maintained at lire 8.50 and lire 8.75. During the whole of the month trade was very brisk. The producers, however, have refused to sell at the market price.

The exports from Messina were greater than in January, having reached 50,000 kilos, in comparison with 40,000 kilos exported in January.

The market for sweet orange has been rather weak. The price dropped from lire 33 to lire 31 per pound about the middle of the month. At the end of the month there was a resumption of buying which brought the price to lire 32. The exports from Messina exceeded those of the previous month.

Bitter orange prices show a decline. The price dropped from lire 29 to lire 28, and at the end of the month was lire 26.75. About 20 kilos were exported from Messina.

Bergamot oil continued to decline in price, dropping to lire 48.

FRENCH ESSENTIAL OILS QUIET

(Special Correspondence to DRUG & CHEMICAL MARKETS)

Marseilles, France, March 18.—The essential oil market is quiet and business extremely dull. Quotations per kilo are as follows:

Francs

Aniseed, Tonka	12.50
Aniseed, Chinese	12
Rosewood	65
Citronella, Java	18
Citronella, Ceylon	18
Geranium, Bourbon	95
Clove	60
Palmarosa	83
Patchouli	240
Petit Grain	50
Sandalwood	250
Ginger Grass	44
Vervain	24
Vetivert, Bourbon	120
Ylang Ylang, Bourbon, 1st quality, 125	
Ylang Ylang, Bourbon 2nd quality, 80	

Colgate & Co., will convert the Indiana State Reformatory at Jeffersonville into a factory about the beginning of 1923. The soap manufacturer has purchased the land on which the reformatory is located.

Ungerer & Co.'s Chicago office is now located at 189 North Clark st., and is in charge of Harry J. Ahles. An office has been opened in St. Louis, in charge of C. L. Iorns.

The Consuming Industries

SENATE COMMITTEE'S TEXTILE TARIFF RATES HIGHER THAN IN FORDNEY BILL

House Duties Were Based on American Valuation Plan, However, While Senate Committee Used Foreign Valuation—Duty on Wool 33 Cents Per Pound—Rates Also Fixed for Woven Fabrics, Blankets Knit Goods, Clothing, and Carpets

(Special to DRUG & CHEMICAL MARKETS)

Washington, D. C., March 28.—The Senate Finance Committee has adopted the wool schedule, fixing a rate of 33 cents per pound, scoured wool basis. This rate was demanded by the Senate agricultural bloc. The committee fixed a rate of 12 cents per pound on carpet wool, with the proviso that if used in the manufacture of carpets 99 per cent of the duty shall be refunded. On wool yarns, the duties are: If valued at not more than 35 cents per pound, 26 cents per pound and 30 per cent ad valorem; if valued at more than 35 cents and not more than \$1 per pound, 39 cents, and 35 per cent ad valorem; if valued at more than \$1 per pound, 39 cents and 40 per cent ad valorem.

On woven fabrics of which wool is the whole or chief value, duties were imposed as follows: Weighing not more than four ounces per square yard and valued up to \$1 per pound, 39 cents per pound and 40 per cent ad valorem, valued at more than \$1 per pound, 49 cents per pound and 50 per cent ad valorem. On fabrics weighing more than four ounces per square yard if valued at not over 60 cents per pound, 26 cents per pound, and 40 per cent ad valorem; if worth more than 60 cents and not more than \$1 per pound, 33 cents, and 45 per cent ad valorem; if worth more than \$1 and not more than \$1.50 per pound, 39 cents, and 50 per cent ad valorem; if valued at more than \$1.50 per pound, 49 cents and 55 per cent ad valorem. If the fabric has been sponged and shrunk then there shall be added to the above duties 2 per cent ad valorem.

On blankets of all kinds, including automobile and buggy robes, when not more than three yards in length, duties were agreed to as follows: If valued at not more than 50 cents per pound, 20 cents per pound and 30 per cent ad valorem; valued at over 50 cents and not over \$1 per pound, 30 cents and 32½ per cent ad valorem; valued at over \$1 and not over \$1.50, 33 cents and 35 per cent ad valorem; if valued at more than \$1.50 per pound, 40 cents per pound, and 40 per cent ad valorem.

On knit fabrics of wool, duties are: If valued at not more than \$1 per pound, 33 cents per pound and 40 per cent ad valorem; when valued at more than \$1 per pound, 49 cents and 50 per cent ad valorem.

On hose, half-hose, mittens, etc., duties were fixed as follows: If valued at not over \$2 per dozen pairs, 39 cents per pound and 35 per cent ad valorem; if valued at more than \$2, the duty shall be 49 cents and 50 per cent ad valorem.

On knit underwear, finished or unfinished, if valued at not more than \$2 per pound, 39 cents per pound and 30 per cent ad valorem; if valued at more than \$2 per pound, 49 cents and 50 per cent ad valorem.

On clothing and wearing apparel not knitted or crocheted, the rates fixed are: If valued at not more than \$2 per pound, 26 cents per pound, and 40 per cent ad valorem; if valued at over \$2 and not over \$4

per pound, 35 cents and 45 per cent ad valorem; if valued at over \$4 per pound, 49 cents and 55 per cent ad valorem.

On Oriental, Axminster, Aubusson and other carpets and rugs as set out in paragraph 1117 of the Fordney bill, the rate was fixed at 50 per cent ad valorem. On carpets and rugs not specially provided for, as designated in paragraph 1118 of the House bill, the rate was made 40 per cent. On ingrain carpets and rugs as set out in paragraph 1118 of the House bill, the rate was made 30 per cent, and on floor covers, designated in the same paragraph the duty was made 40 per cent.

These rates by the Senate Committee are higher than the rates fixed by the House in the Fordney bill, but the House rates were based on the American valuation plan. The Senate rates are based on the foreign valuation, and a comparison is not easy to make.

New Consuming Companies

Cocoz Products Co., Portland, Ore., capital \$50,000. To make chemicals and toilet preparations. Orrin M. Pierce, C. C. Clinton, Guy H. Corlies.

Berts Smith Chemical Co., Inc., Boston, capital \$100,000. To make medicinal preparations. Thomas S. Smith, Sidney S. Fichnah, James E. O'Connell, Dorchester, Boston.

Metal Recording Disc Co., New York, capital \$200,000. To make phonographs. L. E. Dresser, E. E. Eunison, A. B. Heermans. Attorney, W. J. Eunison, 280 Broadway.

Barrett, Nephews & Co., New York, capital \$500,000. Old Staten Island Dyeing Establishment. W. Cheyne, W. J. Wright. Attorney, C. E. Thornall, 50 Church st.

Lynn & Co., Syracuse, N. Y., capital \$10,000. To make soap. J. Lindner, H. J. Wilson, A. V. Moliski. Attorneys, Gerber & Winkelstein, Syracuse.

Peerless Explosives Co., Wilmington, Del., capital \$1,800,000. Incorporated by the Corporation Trust Co. of America.

Fidelity Rubber Co., Dover, Del., capital \$250,000. E. E. Allison, C. R. Allison, New York; A. K. Dohrmann, Jersey City, N. J. Incorporated by the Capital Trust Co. of Delaware.

Armslike Knitting Mills, 201 Dispatch Building, Town of Union, N. J., capital \$500,000. To make jersey cloth and other textiles.

International Rubber Co. of America, Wilmington, Del., capital \$200,000. To manufacture tires.

New York Laboratories, Inc., Wilmington, Del., capital \$250,000. Chemists and druggists.

Phyto Co., New York, capital \$10,000. Druggists. A. Deegan, B. Nutt. Attorney, H. Escher, 114 Liberty st.

Noetling & Betz, Brooklyn, capital 1,000 shares common stock, no par value; active capital \$5,000. F. P. and O. E. Noetling, F. A. Betz. Attorneys, Burroughs, Brown & Kerfoot, 200 Fifth ave., New York.

Bradford Pharmacy Co., Brooklyn, N. Y., capital \$5,000. P. Kessler, F. Moss, A. J. Gross. Attorney, B. Kessler, 32 Court st., Brooklyn.

Sun Ray Enameling Co., Queens, L. I., capital \$50,000. E. F. Donohue, S. Dean, M. E. Smith. Attorneys, Walsh & Hennessy, 342 Madison ave.

Western District Cleaners and Dyers, Long Island City, capital \$20,000. S. Stern, M. Krische, L. Kalowiky. Attorney, I. M. Katz, 280 Broadway.

Ladies Products Co., Dover, Del., capital \$1,000,000. To make soap compounds. Logan Dils, Flushing, L. I.; H. Paul Barnes, Philadelphia; Francis O'Rourke, New York. Incorporated by the Registrar and Transfer Co.

Radial Distributors, Wilmington, Del., capital \$150,000. Chemical products. Incorporated by the Colonial Charter Co.

Pauline Porter, New York, capital \$100,000. To make toilet preparations. P. C. Roberts, V. Mignoli, A. C. Becker. Attorney, R. P. Orr, 255 Montague st., Brooklyn.

B. and Z. Drug Co., New York, capital \$20,000. H. A. and M. Berkowitz, B. Zwanger. Attorney, S. Goodleman, 65 Park Row.

National Bottling Co., Wilmington, Del., capital \$150,000. To make soft drinks. Incorporated by the Corporation Trust Co. of America.

Valacia Products Corp., New York, capital \$10,000. Druggists. L. A. Grupp, C. C. Koons, A. Thill. Attorney, E. C. Morsch, 1028 Gates ave., Brooklyn.

Zenith Paint and Color Corp., New York, capital \$125,000. G. and G. W. Miller, S. Glasner. Attorney, S. C. Sugarman, 1540 Broadway.

Gast-O-Pine Corp., New York, capital \$50,000. Chemists and druggists. M. Gast, W. C. Cartwright, W. S. Rising. Attorney, H. S. Goodspeed, 522 Fifth ave.

Utility Rubber Co., Dover, Del., capital \$1,000,000. To make tires. Guy E. Norwood, New York; F. Haskell Smith, Bloomfield, N. J.; James H. Coghill, Morristown, N. J. Incorporated by U. S. Corporation Co.
Hazleton Drug Co., Dover, Del., capital \$10,000. Incorporated by the Capital Trust Co. of Delaware.
Chochea Corp., Dover, Del., capital \$1,000,000. To manufacture silk and cotton goods. Incorporated by the Capital Trust Co. of Delaware.

Garden City Specialty Drug Co., 144 W. Kinzie st., Chicago, capital \$25,000. Sam Stein, Ernest C. Brunder, Jesse Lowenhaupt, 105 W. Monroe st., Chicago.
Verm-O-Spray Products, Inc., West Haven, Conn., capital \$50,000. To manufacture insecticides. Charles Vincent, A. G. Sargent, Maurice Sulzbach, 78 East ave., West Haven.
Borovik Drug Co., 3958 N. Cicero st., Chicago, capital \$30,000. Harry G. Wexler, Samuel L. Steinberg, Jacob Kaplan.

Gray's Lake Gelatine Co., Gray's Lake, Ill., capital \$160,000. Harry Epstein, Thomas R. Tennant, Anna Epstein. To manufacture gelatine, glue, and chemicals.
Broadway Central Pharmacy, New York, capital \$14,000. B. Miller, M. L. Bloom, L. Koseof. Attorney, L. Rocklin, 110 Rivington st.
G. Kattermann, Passaic, N. J., capital \$250,000. To manufacture silks. Gotthard Kattermann, Anna Kattermann, Arthur Kattermann, Passaic.

Chemitex Products Co., Akron, O., capital \$100,000. To manufacture chemically treated textiles. Dr. C. F. Wharton, William A. Walsh.
A. Weiser, New York, capital \$125,000. To make hosiery. A. Weiser, J. Preiser, J. Gluck. Attorney, M. N. Krakower, 104 Fifth ave.

Whittles, Rochester, N. Y., capital \$100,000. T. A. and M. A. Whittle, C. H. Hynes. To make confectionery. Attorneys, Wile, Oviatt & Gilman, Rochester.
Keystone Recording Laboratories, Dover, Del., capital \$20,000. To make records for phonographs. Incorporated by the Capital Trust Co.

Capital Increases—American Drug Stores, Philadelphia, incorporated under the laws of Delaware, from \$25,000,000 to \$28,000,000.
Ocean Leather Co., New York, from \$41,000,000 to \$41,750,000.

CANADIAN INCORPORATIONS

Dr. Wichels Co., Ltd., Windsor, Ont., capital \$100,000. To manufacture medicines and chemicals. James R. Millman, Julius Wichels, Herbert Wichels.

Kolok, Ltd., London, Ont., capital \$1,000,000. To manufacture medicines. Albert MacGarvey, Joseph W. Scandrelt, Arthur R. Cairncross.

Gestol, Ltd., Winnipeg, Man., capital \$50,000. Manufacturing chemists and druggists. Andrew McBride, Robert Lennox, Samuel B. Field.

Bon Ami, Ltd., Montreal, capital \$300,000. Chemical manufacturers and dealers. Francis J. Laverty, Charles A. Hale, S. G. Dixon.

TEXTILE STRIKE NO NEARER SETTLEMENT

The Rhode Island State Board of Mediation and Conciliation, composed of two representatives of labor, two representatives of employers and a chairman, Justice J. Jerome Hahn of the Rhode Island Superior Court, which has been endeavoring since Feb. 18 to bring about arbitration of the issues involved in the nine-week cotton mill strike, has resigned, owing to failure to get the mill owners and strikers together.

The wool sorters union, one of the five crafts affiliated with the Lawrence Textile Council, Lawrence, Mass., voted unanimously to strike in protest against wage reductions of approximately 20 per cent announced by five mills. The four other constituent bodies—the dyers, finishers, woolen spinners and art square weavers—will also go out.

F. C. Hood, treasurer of the Hood Rubber Co. says: "We estimate that the total sales for the calendar year of 1922 will represent a value of \$27,000,000 as against \$24,000,000 for the calendar year of 1921, and \$32,000,000 for 1920. However, if goods sold this year were to be translated into terms of money values of two years ago, 1922 sales would be nearer \$35,000,000 than \$27,000,000. Our sales for the first three months of 1922 will exceed the sales for the same three months of 1921 by over \$1,000,000."

The Brooklyn Yarn Dye Co., capitalized at \$100,000 has erected a building at Neptune ave. and 23rd st., Brooklyn, 237 feet front and 200 feet deep. Mathias Axel is president. Offices of the company are at 90 West st., New York.

Trade Tips for Sellers

Athens, W. Va., will install a filtration plant.

A filter plant is to be installed by Oklahoma City, Okla.

The Producers' Wood Preserving Co., Louisville, Ky., will erect a plant costing \$500,000.

The Western Laboratories Corp., has been organized as a subsidiary of the Hood River Spray Co., to manufacture disinfectants at Hood River, Ore.

F. W. Gurry, president of the Eatonton Cotton Mills, Eatonton, Ga., announces that the company will build an addition to be equipped for spinning cotton goods.

The Holly Mfg Co., Charlotte, N. C., capitalized at \$400,000, will take over the plant of the Fidelity Mfg. Co., paying \$135,000 for the property.

The Clark Thread Co., Newark, N. J., will install a filtration plant at its bleaching works, under construction at Bloomfield, N. J.

The Birmingham Water Works Co., Birmingham, Ala., will build a purification plant, increasing its capital from \$2,529,700 to \$3,039,700, which will give the company \$500,000 to expend on the work.

Old Fort, N. C., is to have a gingham mill, equipped with 8,000 spindles and costing \$180,000. The work is in charge of D. W. Adams, P. H. Washburn, J. S. Bradley and G. W. Sandlin.

The Champion Paper Co. and Ogdensburg Paper Mills, Inc., have been bought by the Carthage Pulp and Paper Co., Carthage, N. Y. James A. Outterson is president of the Carthage company, which will take possession of the two companies on May 1.

The Scott Paper Co., Philadelphia, is to spend \$500,000 in improvements at its plant, Front and Market sts. A new machine, the largest of its kind in any tissue paper making plant in the world, is to be added to the equipment at an approximate cost of \$150,000. The capacity of the plant will be increased a third when the improvements are completed.

Plans for the annual convention of the American Paper and Pulp Association, April 10 to 13, include a meeting of the Technical Association on Monday, April 10; Book Paper Mfrs. Ass'n, on April 11; dinner of the Card Board Mfrs. Ass'n, April 12, and banquet of the American Paper and Pulp Ass'n, on April 13, at the Hotel Astor.

The annual report of the Owens Bottle Co., for the year ended December 31, 1921, shows net profits of \$1,369,096 after charges and Federal taxes, equivalent to \$1.09 a share on the common stock of \$25 par value, after deductions for preferred dividends. This compares with net profits of \$4,222,205, or \$8.06 a share on the common for the previous year. Total income of \$3,294,563 compares with \$7,788,802.

The Erie Dyeing and Processing Co., of Cleveland O., has opened a branch plant at 1 Nassau ave., Greenpoint, L. I. The company will handle worsted, woolen, merino, mohair, cotton and silk yarns, and tricolette and jersey cloth. The yarn department of the new plant has been the first to start up, and the piece-goods dyeing will be ready in the near future. The plant has a floor area of 45,000 square feet. Eugene W. Seng, vice-president of the company, is in charge.

The Foreign Markets

Imports of Drugs, Chemicals, Dyestuffs, etc., Page 769

COD LIVER OIL HIGHER IN LONDON

Advances Noted Also in Balsam Peru, Chamomile Flowers, Chinese Cantharides, Cocaine, and Ipecac—Lower Prices Quoted on Bichromates, Bleaching Powder, Cloves and Cocoa Butter

(Special Cable to DRUG & CHEMICAL MARKETS)

London, March 29.—Crude drugs and fine chemicals continue dull. Higher prices are asked for balsam Peru, chamomile flowers, Chinese cantharides, cocaine, cod liver oil, and ipecac.

The market is firmer for agar agar, citric acid, and linseed oil. Citronella oil, and creosote, B.P., are easier.

Lower prices are announced on bichromates, bleaching powder, cloves, and cocoa butter.

London, March 18. (By Mail)—Although from all reports the number of enquiries is somewhat better, there is little ground to assume any general improvement in the volume of business.

Bergamot is firmer, being offered c. i. f. at from 19s to 20s per lb. while on spot 20s to 20s 6d is asked.

Caffeine has been reduced by the English makers to 18s per pound for the pure crystals.

Citric acid is easier, at 1s 10d per pound less 5 per cent, and the demand is very small.

Cocoa butter is easier, prime English being now offered ex works at 1s 10d per pound, in ton lots.

Cod Liver Oil—The market has a firmer tendency, owing to small supplies, and the new oil is now quoted at from 98s to 100s per barrel c. i. f. London.

Coumarin is in good demand, and prices have advanced, being now quoted at from 11s to 12s per pound.

Emetine—The makers have reduced their prices to Pure Alkaloid 3s 6d per gramme, Hydrochloride, 2s and Hydrobromide 1s 10d per gramme.

Farina—Dutch is now higher on spot at 27s 6d per cwt.

Glycerine—English No. 1 has been reduced by 15s per cwt. in tins, and by 10s per cwt. in drums. The lowest contract price for 5 tons is 110s in 56 pound tins, and 100s in 10 cwt. drums.

Lemon oil is dearer, owing to better demand, 3s 6d to 3s 9d per pound being now the spot price.

Menthol is again firmer this week, market closing at 25s per pound for Kobayashi and or Suzuki on spot.

Morphine Salts—Makers have reduced their prices and now quote as follows: Alkaloid Cryst, 10s 3d per ounce; Powder, 10s; Acetate, 8s; Meconate, 10s; Sulphate Cryst, 8s 3d; Powder, 8s; Diacetyl, 14s and Diacetyl Hydrochlor, 13s per ounce, all nett.

Saffron—Finest Valencia is very scarce, and has been sold on spot at the record price of 92s per pound.

Shellac is again much higher, usual standard T. N. quality, orange having been sold at from 350s to 360s per cwt, on spot.

Tartaric Acid—The market has been very dull, and English has been sold on spot at 1s 2½d per pound.

Tasaku Kawame died of pneumonia last week at the Hotel Commodore, New York. Mr. Kawame, a Japanese chemist, was accompanying M. Fujita, president of the Tokyo Fujita Co., on a trip around the world investigating the paint industry, when he was taken down with pneumonia and died within a few days.

FOREIGN EXCHANGE

	Par	Current
Great Britain (pound sterling).....	4.886	\$4.354
France (franc).....	.193	.689
Italy (lira).....	.193	.051
Germany (mark) per hundred.....	23.80	.300
Czechoslovakia (crown) per hundred.....	20.30	1.790
Poland (mark) per hundred.....	23.80	.025
Austria (crown) per hundred.....	20.30	.014
Japan (yen).....	.499	.474
Spain (peseta).....	.193	.155
Holland (guilder).....	.402	.376
Belgium (franc).....	.193	.083
Norway (crown).....	.268	.176
Switzerland (franc).....	.193	.194
Sweden (crown).....	.268	.261
Denmark (crown).....	.268	.210
Argentina (peso).....	.424	.362
Brazil (milreis).....	.279	.137
China (Silver dollar—Hongkong).....	.789	.540
(Tael—Shanghai, silver).....	1.082	.725
(Tael—Peking, silver).....	1.156	.770
Russia—(100 rubles).....	51.50	.100

SPAIN'S NEW TARIFF ON CHEMICALS

The new Spanish tariff continues the two scales of duties known as the "First" and "Second" tariffs. While Spain has abrogated most of her commercial treaties preliminary to this revision of the tariff, the products of most countries, including the United States, are being temporarily granted most-favored-nation treatment, including the rates of the "Second" or lower tariff, which are the only ones in the following table prepared by Henry Chalmers, chief of the Division of Foreign Tariffs, Bureau of Foreign and Domestic Commerce, Washington, D. C.

Goods of American origin included in the tariff numbers marked with the letter "C," in order to secure the benefit of the lower tariff rates, must be accompanied by a certificate of origin issued by the competent authorities in this country and vised by the Spanish consul at (or presumably nearest) the place of production. When goods intended for Spain are transshipped at or through another country, the certificate of origin must be accompanied by a transit certificate made out by the customs authorities and vised by the Spanish consul at the intermediate port of entry.

Item	Articles	Former duty Pesetas	Pres.duty Pesetas
Chemicals:			
ex793	Aniline oils, 100 kilos net	22.50	150.00
867	Caustic soda and caustic potash		
	100 kilos gross	9.00	6.00
891	Slag, 100 kilos gross .....	.15	.22
890	Superphosphate of lime, 100 kilos		
	net .....	.15	.22
Dyes and dyestuffs, coal tar:			
(C)795	In powder or crystals, kilo net..	4.00	4.00
(C)796	In paste or solid, do	2.00	2.00
(C)797	Synthetic indigo, do .....	.75	1.00

Duties specific in form are paid in paper pesetas, plus a varying percentage surcharge or agio, to bring the duties up to their gold equivalents. For the month of February this gold surcharge was 28.55 per cent.

"The Mrs E. B. Eddy Chair of Industrial Chemistry" will be the title of a new foundation at McGill University, Montreal, in accordance with the will of the late Mrs. E. B. Eddy who left a bequest for that object. The holder of the professorship will devote special attention to wood chemistry.

DUISBERG SAYS ONLY ONE GERMAN DYE HAS BEEN DUPLICATED BY OTHERS

In Production and Price, He Claims, German Dyes Still Lead in Spite of Ten Years of Research in "Enemy" Countries—Former Markets of Germany Held by the Throat by Tariff Barriers

Dr. C. Duisberg, general director of Fried. Bayer & Co., Levenkusen, Germany, now known as the Farbenfabriken, who is soon to make a trip to the United States in connection with the seized patents of the Bayer company, recently addressed the Society for the Protection of the German Chemical Industry. The "Deutsche Farber Zeitung" quoted Duisberg as saying that only one German color made in other countries had reached the stage to replace the German dye in point of production and price, in spite of ten years of research and experimentation. Under the heading "The Battle for the German Chemical Industry" the paper gave the following account of Dr. Duisberg's speech:

"The undisguised will-to-destroy of our enemies—for they are and continue to be our enemies, in spite of the signatures appended to the Peace Treaty—manifests itself plainly in the prohibition of the production of Diesel motors, and in demanding the partial destruction of the 'Deutsche Werke' at Hanau, Erfurt and Spandau,—enterprises which the diplomatic conference approved and commended. What was at that time pronounced harmless is today declared 'dangerous' and—we are weaponless. The enemy may permit himself any encroachment upon our rights, while we know that we have no redress—and the worst of it all is that in the whole world there is no forum before which we can protest against the assaults and oppression of the enemy.

"By entering into the struggle for the German chemical industry, the spokesmen of our enemies tore the mask from their hypocritical faces. Neither anxiety for world peace, nor even less the battle for humanity, with which our embittered foe plumes himself is the mainspring of his activities, but rather the most despicable commercial jealousy.

"Most noteworthy was the information of the speaker that during the war considerable progress was made in the chemical industry in enemy countries, which, following the cessation of all commerce, will replace the supply formerly available from Germany, both in colors and pharmaceuticals. This led to a tremendous overproduction. In the year 1920 the chemical industry was in the second place in exports; in 1921 exports sank to less than half the pre-war figures and in spite of highly inflated prices and business turn-over. And there is little promise of a better condition, since our former markets are held by the throat by tariff barriers and other protective measures against German products.

"From our world position in the chemical industry, the spokesmen of the opposition try to overthrow us by denying our former eminence. The Peace Treaty should be a guaranty of justice to the German chemical industry. The total chemical production has been reduced about 15 per cent. Dyestuffs are completely crippled because formerly it was possible 'to convert them into plants for the manufacture of explosives and poison gases and threaten the world's peace.' We would like to ask: Can the German plants alone do that, or is it not also possible for the enemy's factories? As a logical sequence, soap factories should be closed, since they manufacture glycerin, which can be changed into nitroglycerin and then into dynamite. Also glycerin must be forbidden for medicinal and

pharmaceutical purposes, because this dangerous product might be threatening to the world peace.

"How furiously this fight is being waged against the German chemical industry is shown by the fact that the British Dyers Corporation has declared that it is unable to replace certain German colors. And that in America there is a veritable famine of German colors. And now Japan declares herself unable to do without German colors."

Dr. Duisberg declared that only one of the colors had reached the stage to replace the German, in point of view of production and price, in spite of the ten years long scientific research and technical experimentation. The report in the "Deutsche Farber Zeitung" closed as follows:

"Who saps the fountain of the German chemical industry, condemns our people to starvation. A starving Germany would matter nothing to England which during the world war smiled coldly over the death of millions of old people and children. That must be held against her for generations. And we must train our children, our grandchildren and our great grandchildren to sing 'Gott strafe England.'"

The Rheinische Gerbstoff und Farbholz-Extraktfabrick Gebrueder Mueller A-G in Benrath had added to its advisory board the names of J. C. Balvin, of New York; D. J. Buxton-Hawley and Dr. W. Moeller, who is general manager of the Renner concern in Hamburg, controlled by British capital. This choice of directors is due to the fact that the Renner company now owns the controlling stock in the Benrath company and is in turn controlled by the Forestal Land, Timber & Railways Co., of London. The management will remain German, it is said, and the company will preserve the outward form of a German joint stock company.

Important changes in import duties of New Zealand, affecting American products, are shown in a special report on the revised New Zealand tariff by the Tariff Division of the Department of Commerce. Rates are higher on canned fruits, glassware, boots and shoes, tires, and confectionery. A preferential tariff of about 10 per cent less than the rate for other countries is granted on British goods.

Colombia is to increase the customs duties. A 20 per cent surcharge has been set upon the import duty on hides and skins, footwear, boot laces, hose, chemicals, cotton and manufactures thereof, except drills, striped goods, and rough finished goods, wool, and miscellaneous commodities. A 25 per cent surcharge has been proposed on hair, linen and silk.

Increases in capitalization were made by 137 German chemical manufacturing firms in 1921, and 78 were reorganized, according to the "Zentral-Handelsregister fur das Deutsche Reich." The total new capital invested during this single year was 1,177,146,500 marks. Thirty of these companies paid 20% or more in dividends in 1921, seven paid 30% or more, one 65% and one 70%.

The Canadian Match Co., Ltd., with general offices in Montreal and factory at Pembroke, Ont., has begun business. The stock is owned by the MacGuire, Paterson & Palmer Co., of Canada, Bryant & Co., London, England, and the Diamond Match Co., of the United States. A. G. Woodruff is in charge of production at Pembroke.

Prices Current of Fine and Heavy Chemicals, Drugs, Essential Oils, Dyestuffs and Oils

EXPLANATION

Prices current quoted herein are spot New York, unless otherwise indicated, for goods in large quantities in original packages of the customary trading unit of weight or measure. Re-sale prices are quoted when second-hands are a factor in the market.

The price range (two sets of figures, e. g., .16-19) indicates either prices for different quantity orders, or else that different manufacturers or importers quote different prices. All price ranges are inclusive.

All quotations are made on the basis of avoirdupois pounds and ounces or American gallons. For the ready reference of exporters and foreign buyers the following tables of equivalents are published:

WEIGHTS AND MEASURES

1 Imperial Gallon (Brit.)	— 1.20 Amer. Gallons
1 American Gallon	— .833 Imperial Gallon
1 American Gallon	— 3.79 liters
1 Liter	— .264 American Gallon
1 American Gallon (H ₂ O)	weighs 8.35 pounds
1 Pound (Avoirdupois)	weighs .454 Kilogram
1 Kilogram	weighs 2.20 pounds (Avoirdupois)

Acids

Acetic, See Heavy Chemicals	
Acetyl-salicylic, 100 lbs.	.75 — .80
Benzoic, U.S.P., Bbls.	.60 — .70
Boric cryst., bbls, 250 lbs.	.11½ — .12¾
Powdered, bbls.	.11½ — .12¾
Butyric Tech., 98 p.c., Carb.	— .90
Camphoric, U.S.P.	4.27 — 4.35
Carbolic cryst., U.S.P., drs.	— .15
1-lb. bottle	— .27
5-lb. bottle	— .23
50 to 110-lb. tins.	— .19
Liquid, U.S.P., 1 lb. bot.	— .26
Crude, 25 p.c., Drums.	.30 — .35
Chromic, 98 p.c., Drums.	.40 — .45
Chrysophanic, Boxes	1.70 — 1.90
Cinnamic, See Aromatic Chemicals	
Citric, crystals, bbls.	.45 — .45½
Powdered	.46 — .46½
Imported, kegs	— .45½
Creosylic, 95-100 p.c., See Coal-tar Crudes	
Formic, 75 p.c., tech., Bbls.	— .18
Gallic, U.S.P., Bbls.	.80 — .85
Glycerophosphoric, 25 p.c.	1.65 — 1.70
Hydrobromic, 40 p.c., Carboys	— .40
Hydrochloric, C.P., carboys	.07 — .09
Hydroiodic, 45 p.c., Bots.	— .20
Hydrofluoric, see Heavy Chemicals	
Hypophosphorous, 50 p.c.	1.65 — 1.70
U.S.P., 10 p.c., Carb.	— .37
Lactic, U.S.P., VIII, Carb.	— .55
U.S.P., IX	— .65
Malic, bbls.	.42 — .44
Molybdic, C.P., Kegs	— 3.00
Muriatic, see Heavy Chemicals	
Nitric, C.P., Carb.	.09 — .10
Oxalic, See Heavy Chemicals	
Picric, kegs, see Intermediates	
Phosphoric, 85-88 p.c., syr. U.S.P.	.16 — .19
50 p.c., tech., Carboys	.09 — .10
Pyrogallic, Resubli., Bots.	— 1.70
Crystals, bottles	1.20 — 1.25
Salicylic, U.S.P., 100 lbs. bbls.	— .26
Second Hands	.24 — .25
Sulfuric, C.P., Carboys	— .07
Sulfurous (6-7 p.c.) Carb.	— .05
Tannic, U.S.P., 25 lb. bbls.	.70 — .75
Tartaric, Crystals	— .30
Powdered, U.S.P.	— .30
Imported, U.S.P., c'st. kegs	.26 — .26½
Powdered	.26½ — .27

Fine Chemicals

Acetanilid, C.P., bbl.	.31 — .33
Acetone, drums	.08 — .11
Acetphenetidin, 100 lbs.	— 1.65
Aconitine, Alk., Cryst., 1 oz. oz.	15.00 — 16.00
Amorphous, (1 oz.)	15.00 — 16.00
Adeps Lanae, Hydrous, bbls.	.10 — .12
Anhydrous	.14 — .16
Alcohol, 190 proof, U.S.P. gal.	— 4.80
Cologne Spirit, 190 proof, gal.	— 4.85
Second Hands, U.S.P. gal.	— 4.75
For Export, U.S.P. gal.	.32 — .35
Wood, 95 p.c., Bbls, drums, gal.	.58 — .60
97 p.c.	.60 — .63
Pure, Bbls.	.75 — .80
Acetone free,	.80 — .85
Second Hands, 95-97 p.c. gal.	.55 — .60
Denatured, 5 & 6, Bbls, Dr. gal.	.31 — .34
Second Hands	.30 — .32
Butyl, Drums	.21 — .25
Iso-propyl, bbls.	— 2.25
Aloin, U.S.P., powd.	.80 — .85
Amidopyrine (10-50 lbs.)	4.25 — 4.50
Ammonium, Acetate, cryst.	.37 — .40
Benzoate, cryst., U.S.P.	.85 — .90
Bichromate, C. P.	.65 — .70
Bromide, gran., 50 lb. bx.	— .28
Imported	.16 — .18
Carb. Dom., U.S.P., kegs.	.13 — .14
Chloride, U.S.P., Bbls.	.18 — .20
Hypophosphite	1.35 — 1.40
Ichthyolate (as to brand)	.75 — 2.50
Iodide, Boxes	— 4.90
Nitrate, C. P., Bbls.	— .40
Oxalate, Pure	.45 — .50
Phosphate (Dibasic)	.40 — .42
Monobasic	.18 — .20
Salicylate, U.S.P.	.53 — .55
Water, Ammonia, (See Heavy Chemicals)	
Amyl Acetate, bulk, drums, gal.	1.95 — 2.40
Antimony Chlor. (Sol. butter of Antimony), Bbls.	— .10
Needle Powder, Kegs.	.04½ — .05
Antipyrine, (50-100 lbs.)	— 1.75
Apomorphine Hydrochlor., ¼s. oz.	12.00 — 12.25
Arecoline Hydrobrom. 5 ozs. oz.	14.00 — 15.00
Argols, red, powd.	.07 — .09
Arsenic Red, See Heavy Chemicals	
White, See Heavy Chemicals	
Arsenous Iodide, U.S.P.	— 6.10
Atropine, Alk. U.S.P. (1 oz.)	9.00 — 9.00
Sulfate, U.S.P., (5-10 ozs.)	5.25 — 5.50
Barbital	— 1.25
Barium Carb. prec., Bbls.	— .25
Dioxide, Kegs	.17 — .21
Iodide, Bots.	— 5.65
Nitrate	.06 — .07
Bay Rum	
Denatured Salicy. Acid, gal.	3.17 — 3.20
or Tartar Emetic, Barrels 50 gal.	— 3.60
Denatured, quinine, gal.	3.50 — 3.60
Benzaldehyde (see Aromatic Chemicals)	
Benzonaphthol	2.65 — 2.75
Berberine Hcl., (5 lbs.)	— 22.00
Acid Sulfate	21.00 — 23.00
Neutral sulfate	21.00 — 23.00
Bismuth Metallic	— 2.20
Ammon. Citrate, U.S.P.	— 5.20
Citrate, U.S.P.	— 2.30
Oxychloride	— 2.50
Salicylate	— 1.55
Subbenzoate	— 2.75
Subcarbonate, U.S.P.	— 2.10
For X-ray Diagnosis	— 2.65
Subgallate	— 2.00
Subiodide	— 3.95
Subnitrate	— 2.00
Second Hands	1.85 — 1.90
Subsalicylate	— 2.20
Bismuth Preps. basis 25 lb. lots, boxes.	— 2.00
Borax, cryst. powd. 400 lb. bbl.	.05½ — .06
Kegs, 150 lbs.	.06 — .06½
Brucine Sulfate (250 ozs.)	.20 — .25
Bromine, Carboys (works)	— .20
Bromoforn	— 1.75
Bromides, See Potass. Brom., etc.	
Cadmium Bromide, crystals	.95 — 1.00
Iodide	— 4.20
Metal sticks	— 1.00

CLASSIFICATION

Items are classified into divisions based upon industrial and trade use and, within these divisions, are arranged alphabetically. The order follows roughly the order of the market reports in the text pages and the running heads at the top of the page serve as a ready index.

Fine Chemicals — medicinal, photographic, CP reagent acids and chemicals, except synthetic aromatics.

Heavy Chemicals — industrial and metallurgical acids and chemicals, except metals, dyestuffs, tanning materials and fertilizers.

Coal-Tar Products—crudes and intermediates.

Oils—the fatty oils of animal, fish, and vegetable origin.

Crude Drugs—the natural botanical products sold through the drug trade, further subdivided according to class.

Essential Oils — include the oleo-resins and are followed by the synthetic aromatic chemicals.

Caffeine alkaloid, 100 lbs.	3.75 — 4.00
Hydrochloride	— 8.00
Hydrobromide	— 5.25
Citrate, U.S.P.	— 3.25
Sulfate	— 6.00
Calcium Glycerophosphate	— 1.75
Hypophosphite	— .65
Iodide	— 4.20
Lactate	.50 — .55
Phosphate, Precip.	.10 — .15
Monobasic	.07 — .09
Sulfocarbonate	— .48
Camphor, Am. ref'd bbls. blk.	— .86
16's in 1-lb. carton	1.01
24's in 1-lb. carton	— 1.01½
32's in 1-lb. carton	— 1.02
Japan refined, 2½ lb. slabs	.87 — .88
Tablets (as to size)	.95 — .98
Chinese refined	.87 — .88
Monobromated, bulk	1.70 — 1.75
Caramel, 50 gal. bbls.	.55 — .66
Carmines, No. 40, 5 lb. bxs.	4.50 — 4.60
Casein, Edible, Bbls.	.35 — .40
Technical	.14 — .15
Castor Oil, AA bbls.	.11½ — .12
Cerium Oxalate	.40 — .42
Chalk, Precip., light, Bbls.	.04 — .05
Heavy	.03½ — .04
Drop	.03½ — .03¾
Charcoal, Powd., Bbls.	.04 — .05
Willow, Powd.	— .06
Bone Black, Powd.	— .08
Chloral Hydrate, U.S.P., crystals, 25 lb. jars, 100 lb. lots	— .86
Chloroform, U.S.P., drums	.37 — .43
Chrysarobin, (See Acid Chrysophanic)	
Cinchonidin, Alk., 100 oz. tin. oz.	— .93
Sulfate	— .60
Cinchonine, Alk., 100 oz. tin. oz.	— .54
Sulfate	— .60
Cocaine, Alkaloid, (10 ozs.)	10.00 — 11.00
Hydrochlor., Cryst., Powd. (25 ozs.)	— 6.00
Small sizes: ¼s 50c extra, ½s 25c, Singles 7c extra per oz.	
Cocoa Butter, 200 lb. bales	.25 — .28
Fingers, cakes, 12 lb. bxs.	.34½ — .37½
Codine, Alk., 10 oz.	— 6.10
Hydrobromide	— 4.90
Hydrochloride	— 5.50
Nitrate	— 5.50
Phosphate	— 4.35
Salicylate	— 4.55
Sulfate	— 4.90
Codine preps. 50c higher ¼s, 25c ½s, 7c single ounces, all in 10 oz. lots.	

C. P. ACIDS

**HYDROCHLORIC
NITRIC
SULPHURIC**

COOPER STANDARD CHEMICALS are always to the fore, maintaining the COOPER QUALITY 65 YEARS by conforming with the most exacting specifications of advanced science.

Thus, the ever increasing demand for our CHEMICALLY PURE ACIDS and other products is in itself a testimonial of the dependability of our chemicals.

Chas. Cooper & Co.

194 Worth St., New York

MANUFACTURING CHEMISTS
ESTABLISHED 1857

Works at Newark, N. J.

Headquarters for Cacodylates

IRON MERCURY SODIUM

and specializing in

Amidopyrine - Guaiacol
Guaiacol Carbonate
Ichthyfos (Ammonium Ichthyolate)
Sodium Methylarsinate

E. Fougera & Co., Inc.

90-92 Beekman St., New York

Established 1849

Our complete chemical line embraces

Bromides Citrates Iodides
Glycerophosphates Quinine Sulphate
Pepsin Resorcinol

Corrosive Sublimate

is used for the
DISINFECTION
of
SEED POTATOES

For the best results
buy a dependable brand

SPECIFY



Powers-Weightman-Rosengarten Co.

Manufacturing Chemists

New York PHILADELPHIA Stt Louis

PHOSPHORIC ACID and PHOSPHATE PRODUCTS

OUR SPECIALTIES

LARGEST PRODUCERS IN THE EAST

WILCKES-MARTIN-WILCKES Co.

135 WILLIAM STREET

NEW YORK

Fine Chemicals

Col Liver Oil, Newf'd.....bbl.	—19.00	Glycerin		Lanolin, See Adeps Lanæ	
Norwegian, 30 gal. bbls.....bbl.	21.00 —25.00	C.P. drums, bbls., extra...lb.	.15½ —.16	Lead Iodide, U.S.P., VIII..lb.	—2.50
Colchicine, Alkaloid, (1 oz.)..oz.	—25.00	Cans, inclusive .....	.17 —.17½	Licorice, U.S.P., Mass.....lb.	—22
Salicylate, (1 oz.).....oz.	—35.00	Dynamite, drums, loose.....lb.	.13½ —.14	Powdered	—40
Collodion, U.S.P. ....lb.	—20	Saponification, loose .....	.09 —.10	Sticks	—50
Flexible, U.S.P. ....lb.	—23	Soap Lye, loose .....	.08 —.09	Comp. Powder .....	.11 —.11
Corn Syrup	100 lbs. 2.27 —2.57	Guaiacol, liquid, (25 lbs.)..lb.	2.75 —3.00	Lithium Carbonate, Kegs....lb.	—1.50
Corrosive Sublimate, see Mercury		Benzate (1 lb.).....lb.	—4.25	Citrate	1.60 —1.70
Cotton Solution, 5 gal. cans..lb.	—35	Carbonate (50 lbs.).....lb.	3.75 —4.25	Magnesium Carb. U.S.P.bbls..lb.	.12 —.13
Coumarin, refined, see Aromatic		Haarlem Oil, dom., cases.gross	—3.50	Technical, bbls. ....lb.	.06 —.08
Cream Tartar, U.S.P., bbls..lb.	—26½	Imported	5.40 —5.50	Blocks cases, 1, 2, 4 ozs..lb.	.18 —.21
Imported, U.S.P. ....lb.	.23½ —.24	Hexamethylenetetramine ...lb.	—70	Glycerophosphate	—3.00
Creosote, U.S.P., Carboys...lb.	.40 —.45	Homatropine, Hydrom.5 ozs.oz.	—15.00	Hypophosphite	—1.20
Carbonate, (25 lbs.).....lb.	1.75 —2.00	Hydrastine, Alkaloid (8 ozs.)..oz.	17.00 —18.00	Oxide	—51
Cresol, U.S.P. ....lb.	.12 —.15	Hydrochloride	17.50 —18.00	Peroxide, cans	—2.15
Diethyl Phthalate .....	.85 —.90	Sulfate, 5 ozs. ....oz.	—19.50	Salicylate .....	.60 —.65
Digitalin, pure, (5-10 ozs.)..oz.	6.75 —7.00	Hydrastinine Hdchl. (1 oz.)..oz.	—30.00	Sulfate, (See Epsom Salt)	
Dionin, See Morph. Ethyl Hydrochl.		Hydrogen Peroxide, U.S.P.,		Malt Syrup kegs.....lb.	—10
Dover's Powder, U.S.P.....lb.	—2.20	10 gr. lots	7.50 —8.00	Manganese Glycerophos....lb.	—3.00
Duboisine Sulfate, (1 oz.)..oz.	—60.00	4-oz. bottles	12.00 —12.25	Hypophosphite, U.S.P., VIII..lb.	1.85 —1.90
Emetine Alk., 15 gr. vials..ea.	—1.00	8-oz. bottles	12.00 —12.25	Iodide	—5.65
Hydrochloride, (1 oz.).....oz.	16.00 —17.50	Hydroquinone, bulk	1.25 —1.35	Sulfate, Crystals	—30
15 gr., vials .....	.75 —.90	Hyoscin Hydrobrom., 5 ozs.oz.	17.00 —17.50	Menthol, Crystals	6.25 —6.60
Epsom Salt, U.S.P. (5 bbls.)cwt.	2.50 —2.75	Hyoscyamine Alkaloid, (1 oz.)..oz.	—21.00	Mercury, flasks, 75 lb.....ea.	49.00 —50.00
Technical	1.00 —1.85	Amorphous Alk. (1 oz.).....oz.	—60.00	Bisulfate	—40
Imported, U.S.P. (5 bbls.)cwt.	1.75 —1.85	Hydbrom. (1 oz.).....oz.	—50.00	Blue Mass	—56
Ergotin, Bonjean	10.00 —10.50	Sulfate	18.00 —19.00	Powdered	—58
Eserine Sulfate, (1 oz.).....oz.	—14.50	Iodides, See Potass. Iodide, etc.		Blue Oint., 30 p.c.....lb.	—56
Salicylate	—18.00	Iodine, Resublimed	—4.05	50 p.c. ....lb.	—72
Alkaloid	—30.00	Tincture, U.S.P., bbls....gal.	—4.00	Citrine Ointment	—40
Ether, U.S.P., 100 lb. drums..lb.	—14	Iodoform, Powdered, bulk..lb.	—5.00	Calomel, Amer. ....lb.	—38
Washed, bulk	—31	Iron Citrate, U.S.P., VIII..lb.	—99	Corrosive Sublimate, cryst..lb.	—56
Nitrous, conc. ....lb.	—97	and Ammon Citrate, U.S.P..lb.	—84	Powdered Granular	—71
U.S.P., 1180, bulk.....lb.	—39	Green scales, U.S.P.....lb.	—84	Iodide, Green	—3.21
Anaesthesia, bulk	—17	Cacodylate	9.00 —9.50	Red	—3.21
Motor Ether, 1 lb. cans...lb.	—26	Chloride, cryst. (ferrie)..lb.	.10 —.11	Yellow	—321
Ethyl Acetate .....	.93 —1.05	Hypophosphite	1.50 —1.60	Red Precipitate	—37
85 p.c. Ester .....	.57 —.60	Iodide	—3.80	Powdered	—1.09
Bromide	—1.00	Syrup, U.S.P. 1900.....lb.	—30	White Precipitate	—1.12
Chloride	—55	Oxalate, scales .....	.80 —.82	Powdered	—1.17
Ethyl Methyl Ketone.....lb.	.12 —.13	and Ammonium, cryst..lb.	.45 —.50	With chalk	—56
Eucalyptol, U.S.P., See Aromatic		and Potassium, cryst..lb.	.47 —.50	Mercurial preps. basis 50 lb.	
Formaldehyde, bbls, wks., C/L..lb.	.08½ —.10	and Sodium, cryst.....lb.	.40 —.45	lots, in boxes or tins.	
Less Carlots, bbls.....lb.	.09 —.10	Phosphate, U.S.P. ....lb.	—89		
Gelatin, silver, 100 lb. cases..lb.	.90 —1.05	Pyrophosphate, U.S.P. ....lb.	—94		
Gold Label	—	Metallic, Reduced	—60		



Acetic Acid

COMMERCIAL REDISTILLED
PURE GLACIAL

Manufactured by

— THE —

Grasselli Chemical Co.

NEW YORK CLEVELAND CHICAGO

The Grasselli Chemical Co., Ltd.

TORONTO

MONTREAL

FORMALDEHYDE

WOOD ALCOHOL

(ALL GRADES)

The Miner Edgar Company
Rail and Water Facilities
120 William Street
New York



Fine Chemicals

Opium cases, U.S.P. ....lb.	— 5.75	Glycerophosphate, 75 p.c. ....oz.	1.85 — 1.90	Hydrochloride ....oz.	— .74
Granular ....lb.	— 7.00	Guaiaac Sulf. (10-25 lbs.) .lb.	2.50 — 2.75	Japanese ....oz.	— .72
Powdered, U.S.P. ....lb.	— 7.00	Hypophosphite, bulk ....lb.	— .85	Hydrochlor. & Urea ....oz.	— .88
Oxgall, pure, U.S.P. ....lb.	— 1.50	Iodide, bulk ....lb.	— 3.15	Hypophosphite ....oz.	— .88
Pancreatin ....lb.	1.50 — 1.60	Second Hands ....lb.	— 3.10	Lactate ....oz.	— .88
Papain ....lb.	2.25 — 2.35	Lactophosphate ....oz.	— .90	Phenolsulfonate ....oz.	— .88
Paraformaldehyde ....lb.	.50 — .55	Nitrate, see Saltpetre		Phosphate ....oz.	— .79
Pepsin Powd., U.S.P. ....lb.	— 2.50	Oxalate, Neutral ....lb.	.40 — .45	Salicylate ....oz.	— .79
Petrolatum, green, 350 bbls. .lb.	.023/4 — .03	Permanganate, U.S.P. ....lb.	.14 — .15	Tannate ....oz.	— .60
Dark Amber ....lb.	— .04	Salicylate ....lb.	— .75	Tartrate ....oz.	— .88
Light Amber ....lb.	— .04 1/2	Sulfate, C.P. ....lb.	.35 — .38	Valerate ....oz.	— .88
Cream White ....lb.	— .07	Tartrate ....lb.	— .65	Quinine preps. basis 100 oz.	
Lily White ....lb.	— .09	Pumice Stone, lump. ....lb.	.04 — .05	tins. Extra for smaller sizes	
Snow White ....lb.	— .12 1/2	Powdered ....lb.	.03 — .04	Quinidine Alk., crystals, tinsoz.	— .96
Phenolphthalein, 100 lbs. ....lb.	1.40 — 1.50	Pyridin ....gal.	— 1.75	Sulfate, tins ....oz.	— .71
Phosphorus, yellow ....lb.	.25 — .26	Quinine Sulf., 100-oz. tins. ....oz.	— .60	Resorcinol, crystals, U.S.P. .lb.	1.75 — 1.90
Pilocarpine, Hydchlor. 25 ozs. ....oz.	— 8.00	1-oz. tins, 100 oz. lots. ....oz.	— .68	Resale ....lb.	1.60 — 1.75
Alkaloid, 15 gr. vial ....ea.	— 1.05	Imported, Java, 100 ozs. ....oz.	— .60	Technical, See Intermediates	
Nitrate ....oz.	— 8.00	Imported, Japanese ....lb.	.58 — .59	Rochelle Salts, crystals ....lb.	— .21
Piperazine Hydrate ....oz.	— .50	Bisulfate, 100 oz. tins. ....oz.	— .60	Imported, U.S.P. ....lb.	— .18
Plaster Paris, true dental. ....bbl.	4.35 — 4.50	Alkaloid ....oz.	— .79	Rosewater, triple ....gal.	— 1.25
Podophyllin ....lb.	— 4.25	Acetate ....oz.	— .88	Saccharin, U.S.P., 100 lbs. ....lb.	1.90 — 1.95
Potassium acetate ....lb.	.33 — .35	Arsenate ....oz.	— .88	Resale ....lb.	1.75 — 1.90
Bicarbonate, U.S.P. ....lb.	.07 1/2 — .08	Benzoate ....oz.	— .88	Sallcin, (25 lbs.) ....lb.	3.75 — 4.00
Bisulfate ....lb.	— .40	Citrate ....oz.	— .88	Salol, U.S.P., bulk ....lb.	.75 — .80
Bromide Crystals, 100 lbs. ....lb.	— .23	Dihydrochloride ....oz.	— .88	Saltpetre, Double ref. bbls. .lb.	.073/4 — .09 1/4
Granulated ....lb.	— .23	Dihydrobromide ....oz.	— .88	Santonin, cryst., (1-10 lbs.) .lb.	147.00 — 150.00
Imported, U.S.P. ....lb.	.16 1/2 — .17	Dicarbonate ....oz.	— 2.00	Powdered ....lb.	148.50 — 151.50
Carbonate, U.S.P. ....lb.	.12 — .13	Ethyl Carbonate ....oz.	— 1.10	Saponin (Ex Quillaja) (100	
Chromate, cryst. yellow,		Ferrocyanide ....oz.	— .88	lbs.) ....lb.	— 1.55
Caustic, U.S.P. (by alcohol) .lb.	— .45	Formate ....oz.	— .88	Seidlitz Mixture, bbls. ....lb.	— .17
U.S.P. purified ....lb.	— .30	Glycerophosphate ....oz.	— .88	Silver Nitrate, 500 oz. lots. ....oz.	.433/4 — .44 1/2
Chlorate, Imp., Powd. ....lb.	.06 — .06 1/2	Hydriodide ....oz.	— .88	Nucleinate ....oz.	.20 — .25
tech. 1-lb., c. b. 10. ....lb.	— .42	Hydrobromide ....oz.	— .79	Proteinates ....oz.	— .34
Citrate, bulk, U.S.P. ....lb.	— .65			Colloidal ....oz.	— 1.60

R. W. GREEFF & CO.

Incorporated

78 FRONT ST. NEW YORK CITY

Western Sales Office:

1266 Transportation Building,
608 S. Dearborn Street, Chicago, Ill.Chemical Merchants
Importers and Exporters

Arsenic

Barium Chloride

Caustic Potash

Cresylic Acid

Formaldehyde 40% Vol.

Formic Acid

Oxalic Acid

Phthalic Anhydride

Precipitated Chalk

Sodium Acetate

Sodium Prussiate

Tartaric Acid

Cable Address: Fergcotrav, New York
All Codes Used

European Representatives:

R. W. GREEFF & CO., LTD.

London and Manchester, England

SOLVENTS

TELEPHONE:
VANDERBILT
8727ACETONE
U. S. P.Commercial Solvents
CorporationEastern Sales and Export
17 E. 42nd St.,
New YorkGeneral Office and Plant
Terre Haute,
Indiana

Cable address "Comsolvent" New York

Fine Chemicals

Methyl Acetone, drums.....gal.	.70 — .72	Hypophosphite, U.S.P. ....lb.	— — .75	Sugar of Milk, Powder.....lb.	.18 — .18½
Methyl salicylate, see Aromatic Chemicals		Iodide, 25 lb. box.....lb.	— — 3.65	Sulfonal, 100-oz. lots.....oz.	— — .38
Methylene Blue, medicinal..lb.	3.50 — 4.00	Nitrate, U.S.P., Bbls.....lb.	.0494 — .05½	Sulfonethylmethane, U.S.P.....lb.	— — 6.75
Milk, powdered .....lb.	.14 — .15	Oxalate, Neutral .....lb.	.35 — .40	Sulfonmethane, U.S.P. ....lb.	— — 4.75
Mineral Oil, white .....gal.	.75 — 1.25	Peroxide, tins .....lb.	.25 — .27	Sulfur Iodide, U.S.P. ....lb.	— — 3.95
Morphine, Acet., 10-oz. in 5s.oz.	— 4.90	Phosphate, U.S.P., gran.....lb.	.07 — .07½	Sulfur, roll, bbls.....100 lbs.	2.15 — 2.70
Hydrobromide, 10-oz. in 5s.oz.	— 4.90	Recryst. ....lb.	— — .13	Flour, 100 p.c. pure.....100 lbs.	2.50 — 3.15
Hydrochloride, 10-oz. in 5s.oz.	— 4.90	Pyrophosphate .....lb.	— — .14	Flowers, 100 p.c. pure.....100 lbs.	3.00 — 3.65
Sulfate, 10-oz. in 5s. ....oz.	— 4.90	Salicylate, U.S.P., 100 lbs..lb.	— — .32	Precip., U.S.P. ....lb.	.17½ — .18½
Diacetyl, Alk., 10 oz., ¼s..oz.	— 8.40	Resale .....lb.	— — .28	Lac Sulfur .....lb.	.08 — .10
Diacetyl Hydcl., 10 oz., ¼s..oz.	— 7.60	Sulfate (Glauber's Salt).cwt.	1.25 — 1.35	Tartar Emetic, tech.....lb.	.29 — .31
Ethyl Hydcl., 10 oz., ¼s..oz.	— 8.95	Needle Crystals .....cwt.	1.75 — 1.80	U.S.P. ....lb.	.36 — .37
Morphine preps. in ¼s vials,		Sulfocarbonate .....lb.	.25 — .26	Talcum, Amer., bags..100 lbs.	— — 1.00
80c higher, ¼s 25c, single		Sparteine Sulfate, (25 ozs.)..oz.	1.25 — 1.35	Purified .....100 lbs.	2.50 — 3.00
ounce 7c.		Strontium Brom. 50 lb. bx.....lb.	— — .29	Terpin Hydrate .....lb.	.58 — .61
Soap, Castile, white pure....lb.	.24 — .30	Carbonate, pure .....lb.	— — .28	Theobromine Alkaloid .....lb.	5.50 — 6.00
Powd., U.S.P., bbls.....lb.	.32 — .35	Iodide, bulk .....lb.	— — 3.50	Thymol, crystals, U.S.P.....lb.	4.40 — 4.50
Green, U.S.P. ....lb.	.07½ — .08½	Nitrate, Kegs .....lb.	— — .09	Iodide, U.S.P., bulk.....lb.	7.75 — 8.00
Sodium Acetate, U.S.P., gran..lb.	.12 — .13	Salicylate, U.S.P. ....lb.	— — .60	Tin bichloride, see Heavy Chemicals	
Benzoate, gran., U.S.P.....lb.	.50 — .60	Strychnine Alkd., cryst.....oz.	— 1.05	Oxide, 500 lb. bbls.....lb.	.37 — .38
Blecarb., U.S.P., powd., bbls..lb.	.02¼ — .02½	Alkaloid, Powd. ....oz.	— — .95	Crystals .....lb.	.28 — .30½
Bromide, U.S.P., 50 lb. bx..lb.	— .20	Acetate .....oz.	— — .95	Toluene, See Coal Tar Crudes	
Imported, U.S.P. ....lb.	.16 — .17	Glycerophosphate .....oz.	— — .95	Tribromphenol .....lb.	— — .85
Cacodylate .....lb.	2.75 — 3.05	Hydrobromide .....oz.	— — .95	Trional .....oz.	— — .47
Caustic, U.S.P., See Sod. Hydroxide		Hydrochloride .....oz.	— — .95	Urea. Imp. Pharmaceutical..lb.	— — .40
Chlorate, U.S.P., 8th Rev.		Hypophosphite .....oz.	— 1.05	Veratrine Sulfate, (1 oz.)....oz.	— 2.50
Crystals, c.b., 10 lbs.....lb.	.13 — .14	Nitrate .....oz.	— — .95	Hydrochloride .....oz.	— 2.50
Granular, c.b., 10 lbs.....lb.	.16 — .17	Phosphate .....oz.	— — .95	Witch Hazel, Ext., dble dist.,	
Chloride, C. P., bbls.....lb.	— .06	Sulfate, crystals, powd....oz.	— — .76	Yohimbin Hydcl., (1 oz.)..oz.	— — 12.50
Citrate, U.S.P., Cryst. VIII..lb.	— .60	Saccharinate .....oz.	— 2.05	Zinc Carbonate, U.S.P., precip..lb.	— — .37
VIII .....lb.	— .60	Strychnine preps. basis 100		Chloride, U.S.P. ....lb.	— — .35
Granular, U.S.P., gran.IX..lb.	— .73	oz. lots, tins. Single		Nitrate .....lb.	— — .42
Cyanide 96-98, see Heavy Chemicals		ounce packing 7c, ¼ oz.		Iodide, bulk .....lb.	— 4.00
Glycerophosphate, crystals..lb.	— 1.95	25c, ¼ oz. 50c extra		Oxide, U.S.P., bbls.....lb.	— — .17
Hydroxide, U.S.P. ....lb.	— — .18			Stearate .....lb.	.20 — .25
				Sulfate, U.S.P. ....lb.	— — .08

Standard Dyes of Uniform Quality

Fast Light Yellow---

Fully equal to pre-war European Products in fastness to sunlight and other properties

Tartrazine---

Standard and concentrated types

Kanawha Chrome Black E H K---

Soluble, a Jet Black suitable for vigoureux printing

Kanawha Chrome Fast Black D---

Not affected by IRON, suitable for dyeing in new Franklin machine

Kanawha Chrome Blue Black 6 B---

Soluble, suitable for vigoureux printing

Alizarine Dyes---

All Shades

Laboratory Service

A. KLIPSTEIN & COMPANY

644-52 GREENWICH STREET, NEW YORK CITY

Boston Philadelphia Chicago
Providence, R.I. Charlotte, R.C.

1816



1922

"Over a Century of Service and Progress"

Caustic Soda Caustic Potash Bleaching Powder

Prompt Shipments

Manufacturers, Importers, Exporters of

Industrial Chemicals

INNIS, SPEIDEN & CO., Inc.

Established 1816

46 CLIFF ST., NEW YORK CITY

Phone BEEKMAN 4031-6

Branch Offices

Chicago Philadelphia Boston Cleveland Gloversville, N. Y.

Factories

Niagara Falls, N. Y. Jersey City, N. J. Murphysboro, Ill.
Owego, N. Y.

Heavy Chemicals

Heavy Chemicals

ACIDS

Acetic, carlots and 10 barrel lots, spot, bbls. extra.		
28 p.c., bbls.....100 lbs.	2.50	— 2.75
56 p.c., bbls.....100 lbs.	5.00	— 5.50
70 p.c. bbls.....100 lbs.	6.50	— 7.00
80 p.c., bbls., Com'l. 100 lbs.	7.89	— 8.64
80 p.c., bbls., pure. 100 lbs.	8.50	— 9.00
Glacial, bbls. ....100 lbs.	8.50	— 9.50
Chlorosulfonic, 93-95 p.c.....lb.	.15	— .16
Hydrobromic, 10 carboys and single carboys, spot.		
Commercial, 48 p.c.....lb.	.35	— .37
Pure, 40 p.c.....lb.	—	— .40
Hydrofluoric, barrels and carboys, carlots and less.		
30 p.c. bbls.....lb.	—	— .07
48 p.c. in carboys.....lb.	.10	— .11
52 p.c. in carboys.....lb.	.11	— .12
60 p.c. in carboys.....lb.	.14	— .14½
White Acid, wks., cbys.....lb.	.25	— .26
Hydrofluosilicic 35 p.c.....lb.	.10	— .12½
Lactic, 22 p.c., dark.....lb.	.04	— .04½
22 p.c., light.....lb.	.05½	— .06
44 p.c., dark.....lb.	.09½	— .10
44 p.c., light.....lb.	.12½	— .13
66 p.c., .....lb.	—	— .16
80 p.c., Imported.....lb.	—	— .18
Mixed, Nitric, tanks wks. unit	.08	— .08½
Sulfuric .....unit	—	— .01
Muriatic, carlots and less, freight allowed.		
18 deg. carboys.....100 lbs.	1.00	— 1.25
20 deg. carboys.....100 lbs.	1.10	— 1.35
22 deg. carboys.....100 lbs.	1.80	— 2.00
Iron Free cbys., 18 deg.		
100 lbs.	1.00	— 1.25
20 deg. ....100 lbs.	1.25	— 1.50
22 deg. ....100 lbs.	1.80	— 2.00

ACIDS

Nitric, carlots and less, freight allowed.		
36 deg. carboys.....lb.	.06½	— .06
38 deg. carboys.....lb.	.06¾	— .06½
40 deg. carboys.....lb.	.06¾	— .07
42 deg. carboys.....lb.	.06¾	— .07½
Oxalic, 10 bbls., wks. & spot lb.	.11½	— .13
Phosphoric, 50 p.c., tech.....lb.	.09	— .10
Syrupy, 85-88 p.c.....lb.	.16	— .19
Pyroligneous, Tech. ....gal.	.10	— .10½
Sulfuric, Tank carlots		
60 deg., f.o.b. wks.....ton	10.00	— 10.50
66 deg., f.o.b. wks.....ton	16.00	— 16.50
20 p.c. Oleum, tanks, f.o.b.		
wks. ....ton	19.50	— 20.00
40 p.c. oleum, drums.....ton	35.00	— 40.00
60 p.c. oleum, drums.....ton	65.00	— 75.00
Sulfuric com. cylinders.....lb.	.08	— .09
Tannic, Tech. barrels.....lb.	.40	— .55
Tungstic .....lb.	1.00	— 1.05
Acetone, C.P. Drums.....lb.	.08	— .11
Acetic Anhydride, 85 p.c. wks. lb.	.32	— .40
Acetyl Chloride, Redistilled. lb.	.45	— .47
Alums, carlots in barrels, and 10 barrels, spot.		
Ammonia, lump .....100 lbs.	3.50	— 3.75
Imported .....lb.	—	—
Ground .....100 lbs.	3.60	— 3.85
Powdered .....100 lbs.	3.90	— 4.15
Chrome .....lb.	.06½	— .07
Potash lump .....lb.	.05	— .05½
Imported .....lb.	.03	— .03½
Ground .....lb.	.05½	— .06
Powdered .....lb.	.06	— .06½
Chrome .....lb.	.06½	— .07
Soda, Ground .....100 lbs.	3.50	— 4.00
Aluminum chloride, carboys. lb.	.04	— .05
Anhydrous, drums .....lb.	.35	— .40
Sulfate Iron free, bbls. 100 lbs.	2.50	— 3.00
Commercial, bbls.....100 lbs.	1.60	— 2.00

Aluminum hydrate light.....lb.	.19	— .20
Ammonia, Anhydrous, cyl.....lb.	—	— .30
Ammonia Water, Drums and carboys.		
26 deg. ....lb.	.07½	— .09½
20 deg. ....lb.	.06	— .08
18 deg. ....lb.	.05½	— .07½
16 deg. ....lb.	.05	— .07
Ammonium Bifluoride, bbls.....lb.	.22	— .28
Imported .....lb.	—	— .22
Carbonate, bbls. ....lb.	.08¾	— .09¾
Lactate .....lb.	—	— .17
Nitrate .....lb.	.05½	— .06¾
Persulfate, bulk .....lb.	—	— .50
Sal Ammoniac, barrels, cars and less, spot.		
Gray, rough .....lb.	.07½	— .08½
Imported .....lb.	.07½	— .07¾
Granulated, white .....lb.	.07½	— .08
Imported .....lb.	.07½	— .07½
Lump, casks, bbls.....lb.	.15½	— .16
Sulfate, dbl. bags, f.a.s. 100 lbs.	—	— 3.25
*Dom., Bulk, wks.....100 lbs.	—	— 2.80
Antimony chloride, liq. cbys. lb.	.12	— .14
Anhydrous, drums .....lb.	.35	— .40
Oxide .....lb.	.07	— .07½
Sulfide, Crimson .....lb.	.35	— .40
Golden, No. 1 .....lb.	.16	— .20
Vermillion .....lb.	—	— .40
Tartrolactate .....lb.	—	— .47
Arsenic, white, bbls.....lb.	.06¾	— .07½
Red .....lb.	.12½	— .13
Metal .....lb.	—	— .17
Barium, chloride, bbls.....ton	75.00	— 80.00
*Imported, cks. ....ton	75.00	— 80.00
Binoxide .....lb.	.21	— .22
Imported .....lb.	.16	— .17
Carbonate .....ton	75.00	— 85.00
Imported .....ton	48.00	— 50.00
Nitrate .....lb.	.09½	— .10
Imported .....lb.	.06	— .06½
Barytes, floated, white.....ton	28.00	— 29.00
Blanc Fixe, .....ton	70.00	— 85.00
Imported .....ton	—	—



LACTIC ACID

ALL STRENGTHS

Dark Commercial, Light Refined, Special
(Light Refined and Edible.)

Acetic Acid	Dipping Acid
Nitric Acid	Aqua Fortis
Sulphuric Acid	Strontium Nitrate
Oleum	Salt Cake
Muriatic Acid	Distilled Water
Mixed Acid	Battery Solutions

Alums

E. I. DU PONT DE NEMOURS & CO., INC.

Acids and Heavy Chemicals Division
3500 Gray's Ferry Road, Philadelphia, Pa.

Branch Offices:

Newark, N. J.
256 Vanderpool St.
New York, N. Y.
21 East 40th St.Canadian Sales Agency
Flint Varnish & Color
Works of Canada, Ltd.
63 Bay St.
Toronto, Ont., Canada

ACETIC ANHYDRIDE

90-95%

(Free of Phosphorus, Chlorine and Sulphur)

CARBON DISULPHIDE

CARBON TETRACHLORIDE

SODIUM PHOSPHATE

Monobasic, Dibasic and Tribasic

SULPHUR CHLORIDE

THE WARNER
CHEMICAL COMPANY

Manufacturers

52 Vanderbilt Avenue, New York

Telephone Murray Hill 262

Plants

Carteret, N. J.

South Charleston, W. Va.

Fine Chemicals

Methyl Acetone, drums.....gal.	.70 — .72	Hypophosphite, U.S.P. ....lb.	— — .75	Sugar of Milk, Powder.....lb.	.18 — .18½
Methyl salicylate, see Aromatic Chemicals		Iodide, 25 lb. box.....lb.	— — 3.65	Sulfonal, 100-oz. lots.....oz.	— — .38
Methylene Blue, medicinal..lb.	3.50 — 4.00	Nitrate, U.S.P., Bbls.....lb.	.049½ — .05½	Sulfonethylmethane, U.S.P....lb.	— — 6.75
Milk, powdered .....lb.	.14 — .15	Oxalate, Neutral .....lb.	.35 — .40	Sulfonmethane, U.S.P. ....lb.	— — 4.75
Mineral Oil, white .....gal.	.75 — 1.25	Peroxide, tins .....lb.	.25 — .27	Sulfur Iodide, U.S.P.....lb.	— — 3.95
Morphine, Acet., 10-oz. in 5s.oz.	— — 4.90	Phosphate, U.S.P., gran.....lb.	.07 — .07½	Sulfur, roll, bbls.....100 lbs.	2.15 — 2.70
Hydrobromide, 10-oz. in 5s.oz.	— — 4.90	Recryst. ....lb.	— — .13	Flour, 100 p.c. pure.....100 lbs.	2.50 — 3.15
Hydrochloride, 10-oz. in 5s.oz.	— — 4.90	Pyrophosphate .....lb.	— — .14	Flowers, 100 p.c. pure.....100 lbs.	3.00 — 3.65
Sulfate, 10-oz. in 5s.....oz.	— — 4.90	Salicylate, U.S.P., 100 lbs..lb.	— — .32	Precip., U.S.P. ....lb.	.17½ — .18½
Diacetyl, Alk., 10 oz., ¼s.oz.	— — 8.40	Resale .....lb.	— — .28	Lac Sulfur .....lb.	.08 — .10
Diacetyl Hydcl., 10 oz., ¼s.oz.	— — 7.60	Sulfate (Glauber's Salt).....cwt.	1.75 — 1.35	Tartar Emetic, tech.....lb.	.29 — .31
Ethyl Hydcl., 10 oz., ¼s.oz.	— — 8.95	Needle Crystals .....cwt.	1.75 — 1.80	U.S.P. ....lb.	.36 — .37
Morphine preps. in ¼s vials,		Sulfocarbolate .....lb.	.25 — .26	Talcum, Amer., bags.....100 lbs.	— — 1.00
50c higher, ¼s 25c, single		Sparteine Sulfate, (25 ozs.)...oz.	1.25 — 1.35	Purified .....100 lbs.	2.50 — 3.00
ounce 7c.		Strontium Brom. 50 lb. bx.....lb.	— — .29	Terpin Hydrate .....lb.	.58 — .61
Soap, Castile, white pure....lb.	.24 — .30	Carbonate, pure .....lb.	— — .28	Theobromine Alkaloid .....lb.	5.50 — 6.00
Powd., U.S.P., bbls.....lb.	.32 — .33	Iodide, bulk .....lb.	— — 3.50	Thymol, crystals, U.S.P.....lb.	4.40 — 4.50
Green, U.S.P. ....lb.	.07¼ — .08¼	Nitrate, Kegs .....lb.	— — .09	Iodide, U.S.P., bulk.....lb.	7.75 — 8.00
Sodium Acetate, U.S.P., gran..lb.	.12 — .13	Salicylate, U.S.P. ....lb.	— — .60	Tin bichloride, see Heavy Chemicals	
Benzoate, gran., U.S.P....lb.	.50 — .60	Strychnine Alkd., cryst.....oz.	— — 1.05	Oxide, 500 lb. bbls.....lb.	.37 — .38
Bicarb., U.S.P., powd., bbls..lb.	.024 — .02½	Alkaloid, Powd. ....oz.	— — .95	Crystals .....lb.	.28 — .30½
Bromide, U.S.P., 50 lb. bx..lb.	— — .20	Acetate .....oz.	— — .95	Toluene, See Coal Tar Crudes	
Imported, U.S.P. ....lb.	.16 — .17	Glycerophosphate .....oz.	— — .95	Tribromphenol .....lb.	— — .85
Caedylate .....lb.	2.75 — 3.05	Hydrobromide .....oz.	— — .95	Trional .....oz.	— — .47
Caustic, U.S.P., See Sod. Hydroxide		Hydrochloride .....oz.	— — .95	Urea, Imp. Pharmaceutical..lb.	— — .40
Chlorate, U.S.P., 8th Rev.		Hypophosphite .....oz.	— — 1.05	Veratrine Sulfate, (1 oz.)...oz.	— — 2.50
Crystals, c.b., 10 lbs.....lb.	.13 — .14	Nitrate .....oz.	— — .95	Hydrochloride .....oz.	— — 2.50
Granular, c.b., 10 lbs.....lb.	.16 — .17	Phosphate .....oz.	— — .95	Witch Hazel, Ext., dble diat.	
Chloride, C. P., bbls.....lb.	— — .06	Sulfate, crystals, powd....oz.	— — .76	Yohimbin Hydchl., (1 oz.)...oz.	— — 12.50
Citrate, U.S.P., Cryst. VIII..lb.	— — .60	Saccharinate .....oz.	— — 2.05	Zinc Carbonate, U.S.P., precip..lb.	— — .37
VIII .....lb.	— — .60	Strychnine preps. basis 100		Chloride, U.S.P. ....lb.	— — .35
Granular, U.S.P., gran.IX..lb.	— — .73	oz. lots. tins. Single		Nitrate .....lb.	— — .42
Cyanide 96-98, see Heavy Chemicals		ounce packing 7c, ¼ oz.		Iodide, bulk .....lb.	— — 4.00
Glycerophosphate, crystals..lb.	— — 1.95	25c, ¼ oz. 50c extra		Oxide, U.S.P., bbls.....lb.	— — .17
Hydroxide, U.S.P. ....lb.	— — .18			Stearate .....lb.	.20 — .25
				Sulfate, U.S.P. ....lb.	— — .08

Standard Dyes of Uniform Quality

Fast Light Yellow---

Fully equal to pre-war European Products in fastness to sunlight and other properties

Tartrazine---

Standard and concentrated types

Kanawha Chrome Black E H K---

Soluble, a Jet Black suitable for vigoureux printing

Kanawha Chrome Fast Black D---

Not affected by IRON, suitable for dyeing in new Franklin machine

Kanawha Chrome Blue Black 6 B---

Soluble, suitable for vigoureux printing

Alizarine Dyes---

All Shades

Laboratory Service

A. KLIPSTEIN & COMPANY

644-52 CROSWICK STREET, NEW YORK CITY

Boston Philadelphia Chicago
Providence, R.I. Charlotte, N.C.

1816



1922

"Over a Century of Service and Progress"

Caustic Soda Caustic Potash Bleaching Powder

Prompt Shipments

Manufacturers, Importers, Exporters of

Industrial Chemicals

INNIS, SPEIDEN & CO., Inc.

Established 1816

46 CLIFF ST., NEW YORK CITY

Phone BEEKMAN 4031-8

Branch Offices

Chicago Philadelphia Boston Cleveland Gloversville, N. Y.

Factories

Niagara Falls, N. Y. Jersey City, N. J. Murphysboro, Ill.
Owego, N. Y.

Heavy Chemicals

Heavy Chemicals

ACIDS

Acetic, carlots and 10 barrel lots, spot, bbls. extra.		
28 p.c., bbls.....100 lbs.	2.50	- 2.75
56 p.c., bbls.....100 lbs.	5.00	- 5.50
70 p.c., bbls.....100 lbs.	6.50	- 7.00
80 p.c., bbls., Com'l. 100 lbs.	7.89	- 8.64
80 p.c., bbls., pure.....100 lbs.	8.50	- 9.00
Glacial, bbls.....100 lbs.	8.50	- 9.50
Chlorosulfonic, 93-95 p.c.....lb.	.15	- .16
Hydrobromic, 10 carboys and single carboys, spot.		
Commercial, 48 p.c.....lb.	.35	- .37
Pure, 40 p.c.....lb.	—	- .40
Hydrofluoric, barrels and carboys, carlots and less.		
30 p.c. bbls.....lb.	—	- .07
48 p.c. in carboys.....lb.	.10	- .11
52 p.c. in carboys.....lb.	.11	- .12
60 p.c. in carboys.....lb.	.14	- .14½
White Acid, wks., chys.....lb.	.25	- .26
Hydrofluosilicic 35 p.c.....lb.	.10	- .12½
Lactic, 22 p.c., dark.....lb.	.04	- .04½
22 p.c., light.....lb.	.05½	- .06
44 p.c., dark.....lb.	.09½	- .10
44 p.c., light.....lb.	.12½	- .13
66 p.c.....lb.	—	- .16
80 p.c., Imported.....lb.	—	- .18
Mixed, Nitric, tanks wks. unit	.08	- .08½
Sulfuric.....unit	—	- .01
Muriatic, carlots and less, freight allowed.		
18 deg. carboys.....100 lbs.	1.00	- 1.25
20 deg. carboys.....100 lbs.	1.10	- 1.35
22 deg. carboys.....100 lbs.	1.80	- 2.00
Iron Free chys., 18 deg.		
100 lbs.	1.00	- 1.25
20 deg. ....100 lbs.	1.25	- 1.50
22 deg. ....100 lbs.	1.80	- 2.00

ACIDS

Nitric, carlots and less, freight allowed.		
26 deg. carboys.....lb.	.06½	- .06
38 deg. carboys.....lb.	.06½	- .06½
40 deg. carboys.....lb.	.06½	- .07
42 deg. carboys.....lb.	.06½	- .07½
Oxalic, 10 bbls., wks. & spot.	.11½	- .13
Phosphoric, 50 p.c., tech.....lb.	.09	- .10
Syrupy, 85-88 p.c.....lb.	.16	- .19
Pyroligneous, Tech.....gal.	.10	- .10½
Sulfuric, Tank carlots		
60 deg., f.o.b. wks.....ton	10.00	- 10.50
66 deg., f.o.b. wks.....ton	16.00	- 16.50
20 p.c. Oleum, tanks, f.o.b. wks.	19.50	- 20.00
40 p.c. oleum, drums.....ton	35.00	- 40.00
60 p.c. oleum, drums.....ton	65.00	- 75.00
Sulfurous com. cylinders.....lb.	.08	- .09
Tannic, Tech. barrels.....lb.	.40	- .55
Tungstic.....lb.	1.00	- 1.05
Acetone, C.P. Drums.....lb.	.08	- .11
Acetic Anhydride, 85 p.c.wks.....lb.	.32	- .40
Acetyl Chloride, Redstilled.....lb.	.45	- .47
Alums, carlots in barrels, and 10 barrels, spot.		
Ammonia, lump.....100 lbs.	3.50	- 3.75
Imported.....lb.	—	- —
Ground.....100 lbs.	3.60	- 3.85
Powdered.....100 lbs.	3.90	- 4.15
Chrome.....lb.	.06½	- .07
Potash lump.....lb.	.05	- .05½
Imported.....lb.	.03	- .03½
Ground.....lb.	.05½	- .06
Powdered.....lb.	.06	- .06½
Chrome.....lb.	.06½	- .07
Soda, Ground.....100 lbs.	3.50	- 4.00
Aluminum chloride, carboys.....lb.	.04	- .05
Anhydrous, drums.....lb.	.35	- .40
Sulfate Iron free, bbls. 100 lbs.	2.50	- 3.00
Commercial, bbls.....100 lbs.	1.60	- 2.00

Aluminum hydrate light.....lb.	.19	- .20
Ammonia, Anhydrous, cyl.....lb.	—	- .30
Ammonia Water, Drums and carboys.		
26 deg. ....lb.	.07½	- .09½
20 deg. ....lb.	.06	- .08
18 deg. ....lb.	.05½	- .07½
16 deg. ....lb.	.05	- .07
Ammonium Bifluoride, bbls.....lb.	.22	- .28
Imported.....lb.	—	- .22
Carbonate, bbls.....lb.	.08½	- .09½
Lactate.....lb.	—	- .17
Nitrate.....lb.	.05½	- .06½
Persulfate, bulk.....lb.	—	- .50
Sal Ammoniac, barrels, cars and less, spot.		
Gray, rough.....lb.	.07½	- .08½
Imported.....lb.	.07½	- .07½
Granulated, white.....lb.	.07½	- .08
Imported.....lb.	.07½	- .07½
Lump, casks, bbls.....lb.	.15½	- .16
Sulfate, dbl. bags, f.a.s. 100 lbs.	—	- 3.25
*Dom. Bulk, wks.....100 lbs.	—	- 2.80
Antimony chloride, liq. chys.....lb.	.12	- .14
Anhydrous, drums.....lb.	.35	- .40
Oxide.....lb.	.07	- .07½
Sulfide, Crimson.....lb.	.35	- .40
Golden, No. 1.....lb.	.16	- .20
Vermillion.....lb.	—	- .40
Tartrolactate.....lb.	—	- .47
Arsenic, white, bbls.....lb.	.06½	- .07½
Red.....lb.	.12½	- .13
Metal.....lb.	—	- .17
Barium, chloride, bbls.....ton	—	- —
*Imported, cks.....ton	75.00	- 80.00
Binoxide.....lb.	.21	- .22
Imported.....lb.	.16	- .17
Carbonate.....ton	75.00	- 85.00
Imported.....ton	48.00	- 50.00
Nitrate.....lb.	.09½	- .10
Imported.....lb.	.06	- .06½
Barytes, floated, white.....ton	28.00	- 29.00
Blanc Fixe.....ton	70.00	- 85.00
Imported.....ton	—	- —



LACTIC ACID

ALL STRENGTHS

Dark Commercial, Light Refined, Special
{Light Refined and Edible.

Acetic Acid Dipping Acid
Nitric Acid Aqua Fortis
Sulphuric Acid Strontium Nitrate
Oleum Salt Cake
Muriatic Acid Distilled Water
Mixed Acid Battery Solutions

Alums

E. I. DU PONT DE NEMOURS & CO., INC.
Acids and Heavy Chemicals Division
3500 Gray's Ferry Road, Philadelphia, Pa.

Branch Offices:

Newark, N. J.
256 Vanderpool St.
New York, N. Y.
21 East 40th St.

Canadian Sales Agency
Flint Varnish & Color
Works of Canada, Ltd.
63 Bay St.
Toronto, Ont., Canada



ACETIC ANHYDRIDE

90-95%

(Free of Phosphorus, Chlorine and Sulphur)

CARBON DISULPHIDE

CARBON TETRACHLORIDE

SODIUM PHOSPHATE

Monobasic, Dibasic and Tribasic

SULPHUR CHLORIDE

THE WARNER
CHEMICAL COMPANY

Manufacturers

52 Vanderbilt Avenue, New York

Telephone Murray Hill 262

Plants

Carteret, N. J.

South Charleston, W. Va.

Heavy Chemicals

Bleaching Powder, Drums, carlots.		Fuller's Earth, f.o.b. mines.....ton	16.00	-17.00	Nickel oxide	lb.	.40	— .45
F.o.b. wks., Contract.....100 lbs.	— 1.75	Imported, bags	ton	35.00	-40.00	Salts, single	lb.	.11 — .13
Prompt	100 lbs.	Fusel Oil, crude, drums.....gal.	1.35	— 1.65	double	lb.	.11 — .13	
Export, f.a.s.	100 lbs.	Refined, drums	gal.	3.00 — 3.30	Nitre Cake, bulk wks., C/L.....ton	4.00	4.50	
Imported, Drums and barrels, spot	100 lbs.	Kieselguhr	100 lbs.	1.75 — 2.00	Orange Mineral	lb.	.11 — .13	
Bromine, Purified wks.....lb.	— .20	Lead Acetate, Barrels, freight allowed.			Paris Green	lb.	.18 — .20	
Calcium Acetate, bags.....100 lbs.	— 1.75	White cryst.	lb.	.11 — .11½	Paris White	ton	15.00 — 16.00	
Arsenate, bbls.	lb.	White, broken	lb.	.10½ — .11	Phosphorus red, cases.....lb.	— .50		
Carbide, drums	lb.	Granulated	lb.	.10¾ — .11¾	Imported	lb.	.25 — .27	
Carbonate, bags	100 lbs.	Brown, broken	lb.	.09½ — .10½	Yellow, cases	lb.	.25 — .35	
Chloride, solid, f.o.b.N.Y.....ton	— 24.50	Arsenate, powdered, bbls.....lb.	.11½ — .13		Imported	lb.	.23 — .25	
Imported	ton	Nitrate	lb.	— .15	Oxychloride	lb.	.35 — .37	
Granulated, f.o.b. N.Y.....ton	— 30.50	Oxide, Litharge, Amer. pd.....lb.	.07½ — .07¾		Sesquisulfide	lb.	— .40	
Flaked, f.o.b. N.Y.....ton	— 30.50	Red, American	lb.	.08 — .08½	Trichloride	lb.	.35 — .40	
Anhydrous	lb.	Sulfate, basic white.....lb.	.06¾ — .07		Plaster of Paris, tech.....bbl.	4.25	— 4.50	
Lactate	lb.	White, Basic Carb., Amer. dry	lb.	.07¾ — .07¾	Potash, Caustic, drums, carlots and less, F.o.b. N. Y.			
Nitrate, bags	ton	Lithopone, bbls C/L & LC/L.....lb.	.06 — .06½		Domestic 88-92 p.c.....lb.	.08	— .10	
Chlorine, liquid, cyl., wks.....lb.	.05 — .05½	Imported	lb.	.05½ — .05½	Imported	lb.	.05¾ — .06¾	
Carbon bisulfide, C.L. & less.....lb.	.06 — .07	Lime, hydrate	ton	.01 — .01½	Domestic, 70-75 p.c.....lb.	—	—	
Carbon black	lb.	Acetate	100 lbs.	— 1.75	Potassium Bichromate, Barrels, carlots and less, spot.			
Carbon tetrachlor., C.L.&Less.....lb.	.09½ — .10½	Nitrate	ton	— 40.00	Binoxalate, tech.	lb.	.40 — .42	
Cobalt Oxide	lb.	Sulfur, Powd.	lb.	.10½ — .12	Crystals	lb.	.10 — .10½	
Copper Carbonate	lb.	Magnesite	ton	70.00 — 72.00	Powdered	lb.	.13 — .13½	
Cyanide	lb.	Magnesium Sulfate, Technical, bbls. carlots and 10 bbls.			Carbonate, 80-85 p.c., bbls.....lb.	.04½ — .05		
Oxide	lb.	Domestic	100 lbs.	1.85 — 2.00	Hydrated	lb.	.06½ — .08	
Subacetate (Verdigris)	lb.	Imported	lb.	.90 — 1.00	*85-90 p.c.	lb.	—	
Sulfate LC/L spot.....100 lbs.	5.40 — 5.50	Carbonate, tech.	lb.	.06 — .08	90-95 p.c.	lb.	.06 — .06½	
C/L delivered	100 lbs.	Chloride, fused, f.o.b. N.Y.....ton	36.00	— 40.00	95-98 p.c.	lb.	.06½ — .07½	
Tartrate (verdigris substitute)	lb.	Flaked, f.o.b. N. Y.....ton	38.00	— 42.00	Potassium Chlorate, Carlots and less in barrels.			
Copperas, wks., Bulk.....100 lbs.	.75 — 1.00	Fluosilicate, 30% soln.....100 lbs.	8.00	— 10.00	Crystals, American	lb.	.08 — .10	
Ferric Chloride, crys.....lb.	.10 — .11	Manganese Chloride	lb.	.12 — .13	Imported	lb.	.06 — .06½	
Liquid, 40 deg.	lb.	Dioxide, 80-84 p.c., 10 bbls.....ton	80.00	— 85.00	Powdered, American	lb.	.08 — .10	
Ferrous Chloride, crys.....lb.	.06 — .06½	85-90 p.c.	ton	85.00 — 90.00	Imported	lb.	.06 — .06½	
Sulfide	100 lbs.	Sulfate	lb.	.11 — .13	Pyrotechnic, 200 mesh, imp.....lb.	.07	— .07½	
Flake White	lb.				Muriate, basis 80 p.c., bgs.unit	.60	— .65	
Fluorspar, 95 p.c. ex-dock.....ton	— 25.00							
96 p.c. ex-dock.....ton	— 30.00							
98 p.c. ex-dock.....ton	— 35.00							

Victor Chemical Works

Chicago

St. Louis New York Nashville

Manufacturers
ofPHOSPHATE OF SODA
TRI SODIUM PHOSPHATE

EPSOM SALTS

Technical U. S. P.

Ammonium Phosphate
Baking Powder Chemicals

ACIDS—

Oxalic— Formic—
(99.5% Pure) (All strengths)
Phosphoric

SULPHUR

SUBLIMED

ROLL BRIMSTONE

FLOWERS

PRECIPITATED 100%

LAC SULPHUR

BATTELLE & RENWICK

Estb. 1840

Incp. 1902

80 Maiden Lane, New York, N. Y.

Heavy Chemicals

Potassium Metabisulfite .....lb.	.23 — .25	Sodium Acetate .....lb.	.04 — .04½	Silicofluoride .....lb.	.08½ — .09
Perchlorate, 10 bbls. & less. lb.	.12 — .14	Aluminum Sulfate, bbls. 100 lbs.	3.50 — 4.00	Sulfate, Gl'b salt.....100 lbs.	1.25 — 1.50
Permanganate, Com'l., bbls. lb.	.14 — .16	Bicarbonate, bbls. & kgs. 100 lbs.	2.30 — 2.55	Imported .....100 lbs.	.95 — 1.00
Imported .....lb.	.14 — .16	Bichromate, bbls. C/L &		Sulfide, 60 p.c., fused bbls.	
U.S.P. See Fine Chemicals		LC/L .....lb.	.07½ — .08½	& drums .....lb.	.05 — .05½
*Potass. Prussiate, red.....lb.	.60 — .70	Bisulfite, Powd. ....lb.	.04½ — .04¾	Imported .....lb.	.04½ — .04¾
Yellow .....lb.	.26 — .27	Solution 32-40 deg. 100 lbs.	1.35 — 2.00	30 p.c. crystals .....lb.	.03 — .03½
Sulfate .....unit	— 1.00	Carbonate Sal. bbls. 100 lbs.	1.65 — 1.90	Sulfate, Crystals .....lb.	.03½ — .03¾
Titanium Oxalate .....lb.	— .50	Chlorate, 10 bbls. ....lb.	— .07	Dessicated .....lb.	.09½ — .10½
Salt Cake, bulk, C/L wks. ton	17.00 — 20.00	Imported .....lb.	.06 — .06½	Sulfocyanide, bbls. ....lb.	.45 — .47
Salt, tech. ....ton	12.00 — 15.00	Chloride, tech. ....ton	12.00 — 15.00	Thiocyanate .....lb.	.45 — .47
Saltpetre, bbls. C/L & less. lb.	.07½ — .09½	Cyanide, 96-98 p.c., bbls. lb.	.26 — .28	Tungstate, crys. ....lb.	.80 — .85
Imported .....lb.	.06½ — .07	73-76 p.c. ....lb.	.23½ — .25	Dessicated .....lb.	.70 — .75
Note: Prices on soda alkalies are based on actual percentages and not N. Y. & L. test.					
Soda Ash, 58 p.c. light, bgs., resale spot flat.....100 lbs.	1.80 — 2.10	*Imported 120 p.c. ....lb.	.23 — .23½	Strontium Nitrate, bbls. ....lb.	.12 — .14
Contract, Basis 48 p.c. carlots wks., Bags .....100 lbs.	— 1.20	*128 p.c. ....lb.	.23 — .26	Imported .....lb.	.07½ — .08
Prompt and spot, Basis 48 p.c. carlots, wks., bags. 100 lbs.	1.25 — 1.30	Fluoride, bbls. ....lb.	— .10	Carbonate, imp. ....lb.	.10 — .15
Soda Ash, 58 p.c. dense, bgs., resale, spot flat.....100 lbs.	1.90 — 2.00	Imported .....lb.	.09½ — .10	Sulfur Chloride, red, drums. lb.	.05 — .06
Contract, Basis 48 p.c. carlots wks., Bags .....100 lbs.	— 1.25	Hyposulfite .....lb.	.40 — .45	Yellow .....lb.	.04½ — .05
Prompt and spot, Basis 48 p.c. carlots, wks., bags. 100 lbs.	1.30 — 1.35	Hyposulfite, Barrels and kegs, carlots.		Sulfur Dioxide liq. cyl. ....lb.	.08 — .09
Soda, Caustic, 76 p.c. solid, resale spot, flat.....100 lbs.	3.65 — 3.75	Crystals .....100 lbs.	3.25 — 3.50	Sulfur, crude ex dock C/L. ton	18.00 — 20.00
Contract, Basis 60 p.c., wks. carlots .....100 lbs.	— 2.50	Granulated .....100 lbs.	3.70 — 3.95	Flour Com'l., bbls. ....100 lbs.	1.70 — 2.00
Prompt and spot, Basis 60 p.c. wks., carlots. 100 lbs.	2.57½ — 2.60	Nitrate, crude, bags C/L 100 lbs.	2.85 — 2.90	Flowers, 100 p.c. bbls. 100 lbs.	3.00 — 3.65
Contract 60 p.c. low grade cars wks. flat.....100 lbs.	— 2.65	Double refined, Gran. bbls. lb.	.04½ — .04¾	Sulfuryl Chloride, drums. ....lb.	— 1.00
Ground and flake, 76 p.c. wks., prompt and spot, carlots, drums, flat ....100 lbs.	— 3.72½	Nitrite, bbls., wks. ....lb.	— .09	Tartar Emetic .....lb.	.29 — .30
Contract, 76 p.c. p.c., carlots, drums, flat.....100 lbs.	— 3.65	Imported, bbls. ....lb.	.09½ — .10	Tin, bichloride 50 p.c. Sol'n. lb.	.10½ — .10¾
		Perborate .....lb.	— .30	Crystals .....lb.	.28 — .30½
		Imported .....lb.	— .20	Oxide .....lb.	.37 — .38
		Peroxide .....lb.	.25 — .27	Tetrachloride .....lb.	.20½ — .22
		Phosphate (tri) .....lb.	.05½ — .06	Whiting, bags .....100 lbs.	1.00 — 1.35
		di-Sodium, U.S.P., gran. lb.	.07 — .08	Imported .....100 lbs.	.70 — .75
		Technical .....lb.	.03½ — .04½	Zinc Carbonate, kegs, carlots and less .....lb.	.14 — .16
		Mono-Sodium, ref. ....lb.	.25 — .27	Chloride, Carlots and less in barrels.	
		Prussiate, Yellow .....lb.	.16½ — .17½	Fused, American .....lb.	.05 — .07½
		Silicate, 60 deg., drums & carboys .....100 lbs.	3.00 — 3.50	Imported .....lb.	.05½ — .05¾
		40 deg., tanks & chys. 100 lbs.	.95 — 1.75	Granulated, American .....lb.	.06 — .08½
				Imported .....lb.	.05½ — .06
				Cyanide, kegs .....lb.	.42 — .43
				Oxide, French, bbls. C/L. ....lb.	.11 — .12½
				American, bbls. C/L. ....lb.	.08 — .09
				Sulfate, bbls., Carlots & less lb.	.02½ — .03

*Nominal

THE CLEVELAND-CLIFFS IRON CO.

KIRBY BUILDING, CLEVELAND, O.

PRODUCERS OF

Wood Alcohol
Acetic Acid
Formaldehyde
Pure Acetone

Methyl Acetone
Sulphuric Acid
Sodium Acetate
Iron Liquor

DISTRIBUTING POINTS

Cleveland
New York
Cincinnati

Boston
Newark
Brooklyn

Marquette
Antrim
Chicago

Detroit
Minneapolis
Gladstone

Coal-Tar Products

Crudes

Anthracene 80-85 p.c.	lb.	.75	—	1.00
40-45 p.c.	lb.	.12	—	.18
Benzene, C. P.	gal.	.29	—	.35
Resale, drums incl. F.A.S.	gal.	.39	—	.41
90 p.c.	gal.	.27	—	.33
Carbazol	lb.	.88	—	1.00
Cresylic Acid, 95 p.c. dark	gal.	.45	—	.47
Straw, 97-99 p.c.	gal.	.50	—	.52
Cresol, U.S.P.	lb.	.12	—	.15
Cresosote oil	gal.	.20	—	.22
Dip. oil	gal.	.24	—	.26
Naphthalene, balls	lb.	.08 1/4	—	.09 1/4
Flake	lb.	.07 1/4	—	.08 1/4
Second Hands	lb.	.06 1/4	—	.07
Phenol, Gov't Surplus	lb.	.12	—	.17
Open Market	lb.	.12	—	.15
Natural	lb.	.15	—	.16
Pitch, various grades	ton	14.00	—	18.00
Solvent naphtha	gal.	.28	—	.31
Tar Acid Oil, 25 p.c.	gal.	.24	—	.26
50 p.c.	gal.	.34	—	.36
Toluene, pure	gal.	.30	—	.36
Xylene, 10 deg. dist. range	gal.	.35	—	.41
5 deg. dist. range	gal.	.40	—	.46
Nitration, 2 deg. range	gal.	.45	—	.51

Intermediates

Acid 1, 2, 4	lb.	.80	—	.85
Acid, Anthranilic	lb.	1.30	—	1.35
Technical	lb.	1.10	—	1.15
Acid Benzoic, tech.	lb.	.45	—	.50
Acid Broenner's	lb.	1.55	—	1.60
Acid Chloracetic, tech.	lb.	.38	—	.40
Acid Cleaves	lb.	1.52	—	1.55
Acid Gamma	lb.	1.90	—	2.00
Acid H	lb.	.85	—	.95
Acid Laurent's	lb.	.75	—	.80
Acid Metanilic	lb.	1.90	—	2.10
Acid Monosulfonic P (delta)	lb.	2.30	—	2.35
Acid Naphthionic, Crude	lb.	.65	—	.67
Refined	lb.	.70	—	.72

Acid Neville & Winther's	lb.	1.25	—	1.30
Acid Phthalic	lb.	.32	—	.35
Anhydride	lb.	.35	—	.37
Acid Picramic	lb.	.65	—	.70
Acid Picric	lb.	.20	—	.40
Acid Salicylic, tech.	lb.	.22	—	.24
Acid Sulfanilic, tech.	lb.	.24	—	.25
Acid Tobias	lb.	1.50	—	1.60
Acetanilide, tech.	lb.	.27	—	.29
p-Aminoacetanilide	lb.	1.25	—	1.30
Aminoazobenzene	lb.	—	—	1.15
p-Aminophenol	lb.	1.25	—	1.35
Hydrochloride	lb.	1.35	—	1.45
o-Aminophenol	lb.	2.50	—	2.75
Aniline Oil, (drums extra)	lb.	15 1/2	—	.36
Aniline Salt	lb.	.24	—	.26
o-Anisidine	lb.	2.00	—	2.10
p-Anisidine	lb.	3.00	—	3.05
Technical	lb.	1.65	—	1.70
Anthraquinone Subl., bbls.	lb.	1.35	—	1.40
25 p.c. paste	lb.	.75	—	.80
Bayer's Salt	lb.	—	—	1.00
Benzaldehyde, Tech.	lb.	.55	—	.60
Benzidine Base	lb.	.88	—	.90
Sulfate	lb.	.70	—	.75
Benzoyl chloride	lb.	1.00	—	1.05
Benzylchloride, redistilled	lb.	.35	—	.37
95% tech.	lb.	.20	—	.25
Bromobenzene	lb.	.35	—	.37
Chlorobenzene, drums	lb.	.10	—	.12
Tanks, wks.	lb.	—	—	.08
Chlorhydrin	lb.	1.50	—	2.00
Diaminophenol	lb.	5.50	—	5.60
Dianilidine	lb.	4.75	—	4.80
o-Dichlorobenzene	lb.	.15	—	.17
p-Dichlorobenzene	lb.	.17	—	.20
Dichlorobenzene, mixed	lb.	.06	—	.07 1/4
Diethylaniline	lb.	.60	—	.62
Dimethylaniline, drums ext.	lb.	.38	—	.42
Dimethylsulfate	lb.	.90	—	.95
Dinitrophenol	lb.	.40	—	.45
Dinitrobenzene	lb.	.21	—	.25
Dinitrochlorobenzene	lb.	.25	—	.27
Dinitronaphthalene	lb.	.33	—	.35
Dinitrotoluene	lb.	.28	—	.27
Diphenylamine	lb.	.60	—	.65

Diphenyloxide	lb.	.75	—	.80
Ethyl Benzyl Aniline	lb.	—	—	1.40
Ethyl Bromide	lb.	—	—	.40
Ethyl Chloride	lb.	—	—	.50
"G" Salt	lb.	.70	—	.72
Hydrazobenzene	lb.	1.30	—	1.35
Methyl Chloride	lb.	—	—	.50
Michler's Ketone	lb.	—	—	.12
Monochlorobenzene, drums	lb.	.10	—	.12
Monothylaniline	lb.	1.00	—	1.05
a-Naphthol, crude	lb.	1.00	—	1.05
Refined	lb.	1.10	—	1.15
b-Naphthol, distilled	lb.	.28	—	.30
a-Naphthylamine	lb.	.30	—	.32
b-Naphthylamine, tech.	lb.	1.00	—	1.05
Sublimed	lb.	1.50	—	1.55
m-Nitroaniline	lb.	.77	—	.80
p-Nitroaniline	lb.	.77	—	.79
p-Nitroacetanilide	lb.	.55	—	.60
Nitrobenzene, redistilled	lb.	.30	—	.31
o-Nitrochlorobenzene	lb.	.38	—	.40
p-Nitrochlorobenzene	lb.	.27	—	.30
p-Nitrophenol	lb.	.75	—	.77
o-Nitrophenol	lb.	.75	—	.77
m-Nitro-p-toluidine	lb.	2.25	—	2.35
p-Nitro-o-toluidine	lb.	2.75	—	2.85
p-Nitrosodimethylaniline	lb.	—	—	.17
Nitrotoluene-s, Mixed	lb.	.15	—	.18
o-Nitrotoluene	lb.	.15	—	.18
p-Nitrotoluene	lb.	.70	—	.72
p-Oxy-benzaldehyde	lb.	1.50	—	1.60
p-Phenetidin	lb.	1.35	—	1.40
m-Phenylenediamine	lb.	1.50	—	1.60
p-Phenylenediamine	lb.	1.00	—	1.05
Phenyl-a-Naphthylamine	lb.	—	—	.70
Phosgene	lb.	.60	—	.62
Phthalic Anhydride	lb.	.35	—	.37
"R" Salt	lb.	.60	—	.68
Resorcinol Technical	lb.	1.30	—	1.35
Sodium o-Chloro-p-toluene sul-	lb.	.25	—	.30
fonate	lb.	.80	—	.85
Metanilate	lb.	.60	—	.65
Naphthionate	lb.	.55	—	.60
Picramate	lb.	.08	—	.09
p-toluene sulfonate	lb.	—	—	.09

THE *Selden* BRANDPHTHALIC ANHYDRIDE
Pure Needle Crystals

MADE BY AIR OXIDATION PROCESS

HIGHEST DEGREE OF PURITY

NO VARIATION IN QUALITY

The Walker
Chemical Company

PITTSBURGH, PENN., U. S. A.

Specifications on Request

DINITROBENZENE

THE temperature at which organic chemicals freeze or solidify from their liquid state is one of the best indications of their purity.

Our refined Dinitrobenzene has a minimum freezing point of 83.0°C. which shows it to be vastly superior to the cruder grades usually available. It is practically free from isomeric impurities and therefore unsurpassed for making meta-nitroaniline and meta-phenylenediamine.

If you wish, further details and a sample can accompany our quotation to cover your entire requirements.

E. I. du Pont de Nemours & Co. Inc.,
Dyestuffs Department,
WILMINGTON DELAWARE
8 Thomas St., New York, N. Y.



Coal-Tar Dyes

Schaeffer's Salt	lb.	.60	—	.65
Thiocarbamide	lb.	.35	—	.37
p-Toluene Sulfonamide	lb.	.40	—	.42
p-Toluene Sulfonchloride	lb.	.15	—	.25
Toluidine	lb.	1.20	—	1.25
Sulfate	lb.	1.00	—	1.10
Toluidine, Mixed	lb.	.30	—	.32
o-Toluidine	lb.	.20	—	.22
p-Toluidine	lb.	1.00	—	1.25
m-Tolylenediamine	lb.	1.00	—	1.05
Triphenyl Phosphate	lb.	.50	—	.60
Xylidine	lb.	.40	—	.45

Coal-Tar Dyes

ACID COLORS:

Black	lb.	.80	—	1.10
Blue	lb.	1.00	—	3.00
Brown	lb.	.80	—	1.25
Fuchsin	lb.	1.50	—	2.50
Green	lb.	1.75	—	3.00
Orange II	lb.	.45	—	.50
Orange III	lb.	.80	—	.60
Red	lb.	.55	—	3.50
Violet	lb.	.65	—	1.00
Azo Yellow	lb.	1.60	—	3.50
Azo Yellow, green shade	lb.	1.50	—	2.00
Brilliant Delphine B.S.	lb.	1.35	—	1.80
Erythrosin	lb.	3.75	—	4.00
Fast Light Yellow, 2-G.	lb.	5.50	—	6.00
Fast Red, 6B extra, con't.	lb.	3.00	—	3.50
Indigotin, conc.	lb.	1.10	—	1.20
Indigotin, paste	lb.	2.40	—	2.75
Metanil Yellow	lb.	1.50	—	1.60
Naphthol Green	lb.	1.20	—	1.30
Naphthylamine Red	lb.	1.50	—	1.60
Orange, R. G.	lb.	6.75	—	7.25
Patent Blue, Swiss Type.	lb.	.55	—	.80
Ponceau	lb.	4.00	—	6.00
Scarlet 2R	lb.	.80	—	.90
Tartarazin, Dom.	lb.	.65	—	.70
Uranine	lb.	1.20	—	1.50
Wool Green S	lb.	8.00	—	9.00
	lb.	1.50	—	4.00

DIRECT COLORS.

Black	lb.	.55	—	.65
Sky Blue, conc.	lb.	1.50	—	1.75
Sky Blue, 5BX.	lb.	—	—	1.75
Blue 2B	lb.	.60	—	.80
Brown R	lb.	.85	—	1.00
Brown G	lb.	1.25	—	1.70
Bordeaux	lb.	1.75	—	2.00
Fast Black	lb.	1.25	—	1.35
Fast Pink	lb.	1.75	—	2.50
Fast Red	lb.	2.35	—	2.50
Fast Yellow	lb.	1.50	—	2.00
Yellow	lb.	2.00	—	2.75
Violet con't	lb.	1.00	—	1.25
Benzopurpurin, 10 B.	lb.	1.85	—	1.90
Benzopurpurin, 4 B.	lb.	1.10	—	1.20
Chrysophenin, Dom.	lb.	1.10	—	1.25
Congo Red 4B Type.	lb.	.80	—	1.00
Diamine Sky Blue F. F.	lb.	1.75	—	2.00
Geranine	lb.	8.75	—	9.25
Oxamine Violet	lb.	—	—	7.00
Primuline	lb.	1.50	—	2.00

OIL COLORS:

Black	lb.	.70	—	.80
Blue	lb.	1.25	—	1.50
Orange	lb.	.95	—	1.00
Red III	lb.	1.65	—	1.75
Scarlet	lb.	1.00	—	1.25
Yellow	lb.	1.25	—	1.50
Nigrosine, Oil Sol.	lb.	.90	—	.95

SULFUR COLORS:

Black	lb.	.20	—	.25
Blue	lb.	.60	—	1.00
Brown	lb.	.35	—	.60
Green	lb.	1.00	—	1.75
Yellow	lb.	.75	—	1.00

CHROME COLORS:

Alizarin Blue, bright.	lb.	5.00	—	5.50
Alizarin, medium	lb.	4.50	—	5.00
Alizarin Brown, conc.	lb.	—	—	2.50
Alizarin Cyanine	lb.	1.10	—	2.00
Alizarin Orange	lb.	1.25	—	1.50

Alizarin Red, 20 p.c. Paste.	lb.	.60	—	1.00
Alizarin Yellow G.	lb.	.85	—	1.00
Alizarin Yellow R.	lb.	1.25	—	1.35
Chrome Black, Dom.	lb.	.55	—	.65
Chrome Blue	lb.	.75	—	2.00
Chrome Brown	lb.	.80	—	1.00
Chrome Green, Dom.	lb.	1.80	—	3.00
Chrome Red	lb.	1.75	—	2.00
Chrome Yellow	lb.	.65	—	1.00
Gallocyanin	lb.	2.30	—	2.60

BASIC COLORS:

Alkali Blue, conc.	lb.	4.50	—	5.00
Auramine O	lb.	1.25	—	1.50
Auramine OO	lb.	1.75	—	2.00
Bismarck Brown R.	lb.	.70	—	.80
Bismarck Brown G.	lb.	1.00	—	1.10
Brilliant Green Crystals.	lb.	2.25	—	2.50
Chrysoidin R	lb.	.75	—	.80
Chrysoidin Y	lb.	.75	—	.80
Crystal Violet	lb.	3.00	—	3.25
Emerald Green, Crystals.	lb.	2.25	—	2.50
Indigo 20 p.c. paste.	lb.	.45	—	.50
Fuchsin Crystals, Dom.	lb.	3.00	—	3.40
Fuchsin Base	lb.	3.00	—	3.50
Malachite Green, Crystals.	lb.	1.60	—	1.65
Malachite Green, Powd.	lb.	1.50	—	1.55
Methylene Blue, tech.	lb.	1.50	—	2.00
Methyl Violet, 3B	lb.	1.75	—	2.00
Methyl Violet, 4B	lb.	—	—	1.35
Methyl Violet, 6B	lb.	2.75	—	3.25
Nigrosine, apts. sol.	lb.	—	—	.70
Nigrosine, water sol., blue.	lb.	—	—	.60
Phosphine G., Domestic.	lb.	2.50	—	3.50
Rhodamine B. ex. con't.	lb.	8.00	—	9.00
Safranine	lb.	2.50	—	3.00
Victoria Blue B.	lb.	2.75	—	3.75
Victoria Blue, base, Dom.	lb.	3.50	—	4.50
Victoria Blue, crys.	lb.	3.50	—	4.50
Victoria Green	lb.	2.00	—	2.10
Victoria Red	lb.	7.00	—	8.00
Victoria Yellow	lb.	7.00	—	8.00
Violamine R & B.	lb.	4.00	—	5.00

CRESYLIC ACID

ALL GRADES, SPOT OR TO IMPORT

Cresol, U. S. P. Refined Naphthalene
(FLAKES)

Phenol, U. S. P. Crude Naphthalene

WILLIAM E. JORDAN, Inc.

13 CLIFF STREET, NEW YORK

Phone Beekman 1758

Cable, Danjor

ANTHRAQUINONE

SUBLIMED SUBLIMED PASTE

Sanborn
Chemical Works

PUTNAM, CONN.

Coal Tar
Disinfectants

Phenol coefficients 2 to 20. Rideal-Walker Test. Produce white emulsion free from deposit. Phenol coefficients guaranteed.

Baird & McGuire, Inc.
Holbrook, Mass. U. S. A.
P. O. Box 473

DIRECT BROWN 2 Y

ESSEX ANILINE WORKS
INC.

Manufacturers of Aniline Colors

88 Broad St., Boston South Middleton, Mass.

The Grasselli Chemical Co., Sole Sales Agts., 117 Hudson St., N. Y.

Dyestuffs

Natural Dyestuffs

Annatto, fine	lb.	.27	—	.30
Seed	lb.	.04	—	.06
Carmine No. 40.....	lb.	5.00	—	6.25
Cochineal	lb.	.33	—	.40
Gambler, see tanning.				
Indigo, Bengal	lb.	—	—	—
Oudes	lb.	—	—	—
Guatemala	lb.	—	—	—
Kurpahs	lb.	—	—	—
Madras	lb.	.88	—	.95
Madder, Dutch	lb.	.27	—	.28
Nutgalls, blue Aleppo.....	lb.	.14	—	.15
Chinese	lb.	.15	—	.16
Quercitron Bark, see tanning.				
Turmeric, Madras	lb.	.06½	—	.06½
Aleppy	lb.	.06	—	.06½

Dyewoods

Barwood	lb.	.05	—	.05½
Camwood, chips	lb.	.10	—	.14
Fustic, sticks	ton	35.00	—	37.00
Chips	lb.	.04	—	.06
Hyperic, chips	lb.	.06½	—	.07
Logwood Sticks	ton	—	—	30.00
Chips	lb.	.02½	—	.03
Quercitron Bark, see tanning.				
Red Saunders	lb.	.12	—	.13

Dye Extracts

Note: Range of prices on dye extracts includes quality range for large quantity.				
Archil, Double	lb.	.16	—	.18
Triple	lb.	.17	—	.19
Concentrated	lb.	.18	—	.20

Cutch, Mangrove, see Tanning				
Rangoon, boxes	lb.	.15	—	.18
Liquid	lb.	.10	—	.11
Tablet	lb.	.13	—	.14
Cudbear, French	lb.	—	—	—
English	lb.	.21	—	.23
Concentrated	lb.	—	—	—
Flavine	lb.	.90	—	.95
Fustic, Solid	lb.	.18	—	.26
Crystals	lb.	.24	—	.26
Liquid, 51 deg.....	lb.	.11	—	.15
Gall	lb.	.16	—	.18
Hematin Extract 51 deg.....	lb.	.11½	—	.13½
Crystals	lb.	.20	—	.27
Hyperic, liquid, 51 deg.....	lb.	.15	—	.20
Logwood, solid	lb.	.15	—	.23
51 deg., Twaddle	lb.	.08	—	.13
Osage Orange, Extract 42 degb.	lb.	.07	—	.10
Crystals	lb.	—	—	.17
Persian Berries	lb.	.27	—	.30
Quebracho, see tanning.				
Quercitron, 51 deg.....	lb.	.06	—	.07
Powdered, 100 p.c.....	lb.	.09	—	.13

Miscellaneous Dyestuffs

Albumen, Egg, edible.....	lb.	—	—	.75
*Technical	lb.	—	—	.65
Blood, imported	lb.	—	—	.60
Domestic	lb.	.40	—	.45
Prussian blue	lb.	.45	—	.50
Soluble	lb.	.45	—	.50
Spray yolk	lb.	.35	—	.45
Turkey Red Oil	lb.	.09	—	.11
Yolk Oil	lb.	—	—	.35
Zinc Dust, prime heavy.....	lb.	.09	—	.09
100-lb. tins	lb.	—	—	.09½
520-lb. casks	lb.	—	—	.08½
Carload lots	lb.	—	—	.08

Dextrins and Starches

British Gum	per 100 lbs.	3.29	—	3.57
Dextrin, Corn, white or yellow	per 100 lbs.	2.99	—	3.27
Potato white or canary.....	lb.	.08	—	.08½
Sago Flour	lb.	.03½	—	.03¾
Starch, Powd., bags.....	100 lbs.	2.42	—	2.70
Pearl, bags	100 lbs.	2.32	—	2.60
Potato, Domestic	lb.	.05½	—	.05¾
Imported, duty paid.....	lb.	.06½	—	.06¾
Tapioca flour, high grade.....	lb.	.04½	—	.04¾
Medium grade	lb.	.03½	—	.03¾
Low grade	lb.	.02½	—	.03

Tanning Woods

Algarobilla	ton	—	—	—
Divi Divi	ton	34.00	—	36.00
Hemlock Bark	ton	16.00	—	18.00
Mangrove, African, 38 p.c.....	ton	—	—	35.00
Bark, S. A.	ton	—	—	—
Myrobalans, J1	ton	—	—	25.00
B1	ton	—	—	30.00
B2	ton	—	—	34.00
R2	ton	—	—	19.00
Oak Bark	ton	20.00	—	23.00
Ground	ton	—	—	25.00
Quercitron Bark rough.....	ton	—	—	10.00
Ground	ton	20.00	—	25.00
Sumac, Sicily, 28 p.c. ton.....	ton	55.00	—	58.00
Virginia, 25 p.c. tan.....	ton	—	—	35.00
Valonia Cups 28-33 p.c.....	ton	31.00	—	35.00
Beard 40 p.c.....	ton	40.00	—	42.00
Wattle Bark	ton	—	—	40.00

GLAUBER'S SALT

BUTTERWORTH-JUDSON CORPORATION

Sales Office—61 BROADWAY, NEW YORK

Phone—Bowling Green 7410 Works—Newark, N. J.

SHINGLE OILS Pale and Dark

CRUDE CARBOLICS CREOSOTE OILS

Protexol Corporation

Successor to

CARBOLINEUM WOOD PRESERVING CO.

39 Barclay Street, New York.

Works: Kenilworth, N. J.

The
Chemical Co. of America, Inc.

Dyestuff Manufacturers

46 MURRAY STREET
New York City

FACTORY:
Springfield, N. J.

BRANCH OFFICES:
Providence Philadelphia

THE YAKUGYO SHUHO

週 The Monthly English Edition of 藥
"The Weekly Druggist"

Sole and Influential Journal to Promote the Trade
of Chemicals, Drugs, Dyestuffs, Etc., Etc.

Subscription: Yen 1.50 per annum
Advertisement on application

THE YAKUGYO SHUHO SHA

12 Hommuracho, Azabu
Tokyo, Japan

Fixed Oils

Tanning Extracts

Chestnut, clarified, 25 p.c. tan, tanks, f.o.b. wks.....lb.	.0134	.02
Powdered, 60 p.c.....lb.	.0534	.06
Decolorized.....lb.	.09	.0934
Gambler, 25 p.c. tan liq.....lb.	.0634	.07
Common.....lb.	.0534	.0534
Cubes, Singapore.....lb.	.07	.0734
Hemlock, 25 p.c. tan works.....lb.	.04	.0434
Larch, 25 p.c. tan.....lb.	.0334	.04
Crystals, 50 p.c. tan.....lb.	.08	.0834
Mangrove, 55 p.c. tan.....lb.	.0634	.0634
Myrobalans, liq., 25 p.c.tan.....lb.	.0534	.0634
Solid, 50 p.c. tan.....lb.	.0634	.07
Oak Bark, liquid, 23-25 p.c.tan.....lb.	.05	.0534
Tanks.....lb.	.0434	.0434
Quebracho, liquid, 35 p.c. tks.....lb.	.0334	.0334
Barrels.....lb.	.04	.0434
35 p.c. tan, bleaching.....lb.	.0434	.05
Solid, 65 p.c. tan ordinary.....lb.	.0434	.0434
Clarified.....lb.	.05	.0534
Spruce, liquid, 25 p.c. tan, works, tanks.....lb.	.01	.0134
Powd., 50 p.c. tan.....lb.	.02	.0234
Sumac, liquid.....lb.	.07	.09

Animal and Fish Oils

(Carloads)		
Cod Newfoundland.....gal.	.57	.60
Tanks.....lb.	—	—
Domestic, prime.....gal.	—	—
Degras American.....lb.	.0334	.04
English.....lb.	.04	.0434
Neutral.....lb.	.06	.07

*Herring, N.Y. bbls.....gal.	.44	.45
Horse.....lb.	.0434	.0434
Lard prime, tech.....gal.	.85	.90
Edible.....gal.	—	1.15
Off prime.....gal.	.83	.92
Extra, No. 1.....gal.	.65	.72
No. 2.....gal.	.70	.77
Menhaden, Light strained.....gal.	.63	.70
Yellow, bleached.....gal.	.53	.58
Extra, bleached, winter.....gal.	.55	.60
Blown.....gal.	.57	.62
*Crude, f.o.b. works, bbls.....gal.	.62	.68
*Tanks, wks.....gal.	—	—
Neatsfoot, 20 deg.....gal.	1.32	1.50
30 deg, cold test.....gal.	1.20	1.25
Pure.....gal.	1.25	1.35
Oleo Oil, No. 1.....lb.	—	.1134
No. 2.....lb.	—	.1034
No. 3.....lb.	.09	.0934
Red Distilled.....lb.	—	.0834
Saponified.....lb.	—	.0834
Salmon, tanks, Coast.....gal.	.33	.34
Sod.....gal.	—	.44
Sperm bleached winter.....gal.	—	1.69
38 deg, cold test.....gal.	—	1.64
45 deg, cold test.....gal.	—	1.64
Stearic Acid, single pressed.....lb.	.09	.0934
Double pressed.....lb.	.0934	.10
Triple pressed.....lb.	.1034	.11
Tallow acidless, tanks.....gal.	.68	.70
Barrels, c.i.....lb.	.75	.82
Whale, natural winter.....gal.	—	.70
Bleached, winter.....gal.	—	.75
Crude, No. 1 tanks, Coast.....lb.	.05	.0534
No. 2.....lb.	—	—

Greases, Lards, Tallows

(New York Markets)		
Grease, Choice White.....lb.	.09	.0934
Yellow.....lb.	.0634	.0634
Brown.....lb.	.06	.0634
House.....lb.	.0634	.0634
Bone Naphtha.....lb.	.0534	.06

Lard City, Steam.....lb.	.1134	.1134
Compound.....lb.	.1334	.1334
Stearine, lard.....lb.	.13	.1334
Oleo.....lb.	.1034	.11
Tallow, edible.....lb.	.0834	.0834
City, Special, loose.....lb.	.0634	.07
(Chicago Markets)		
Tallow, edible.....lb.	.0734	.08
City Fancy.....lb.	.0734	.0734
Prime Packers.....lb.	.07	.0734
Grease, Choice White.....lb.	.0734	.0734
"B" White.....lb.	.0634	.0634
Yellow.....lb.	.0534	.0534
Brown.....lb.	.0434	.05
Bone.....lb.	—	.0434
House.....lb.	.05	.0534
Stearine, prime Oleo.....lb.	.10	.1034
Lard.....lb.	.1134	.12

Vegetable Oils

Castor, No. 1 bbls.....lb.	—	.1134
Case.....lb.	—	.1234
No. 3.....lb.	—	.1034
China Wood Oil, bbls.....lb.	.1434	.15
*Coast, bbls.....lb.	.13	.1334
Orient to N. Y., bbls.....lb.	.1134	.1134
Cocnut Dom., Ceylon, bbls.....lb.	.09	.0934
*Tanks, Spot.....lb.	—	.0834
Cochin, bbls, Dom.....lb.	.0934	.10
*Tanks.....lb.	.0834	.09
Manilla, tanks, coast.....lb.	.0734	.08
Edible.....lb.	.10	.1034
Copra, c.i.f., N. Y.....lb.	.0434	.0434
Corn, refined, bbls.....lb.	—	.13
Crude Tanks Shipping pt.f.....lb.	.10	.1034
Barrels.....lb.	—	.1134
Crude, bbls., N. Y.....lb.	—	—
*Cottonseed, Crude, f.o.b. mills in buyers' tanks.....lb.	—	.10
Prime Summer, Yel. bbls.....lb.	.1034	.1134
*White.....lb.	—	.1234
Winter, yellow.....lb.	—	.1234
*Nominal		

THE NEW BRUNSWICK CHEMICAL CO.

Sales Office and Factory,
85-105 Doremus Avenue, Newark, N.J.



Oils Waxes

Compounds

Essential to Dyeing, Finishing and Sizing

TRY

TERPOL HYDRATE

For Penetration, Thin Boiling
Smoothness and Elasticity on
Cotton Warps and Yarns

WHERE STARCH IS USED
Write for Information

Our Metallic Soaps Won't Wash Anything

They will

Dry
Harden
Flat
Body
Waterproof

Paints
Finishes
Cements
Coatings

Oleates
Palmitates
Stearates
Resinates
Linoleates

Alumina
Lead
Cobalt
Manganese
Calcium

ANY FATTY ACID — ANY METAL

Metasap Chemical Co.

Subsidiary of National Oil Products Co.

15-25 Essex St., Harrison, N. J.

Naval Stores and Fertilizers

Linseed, raw car lots.....gal.	—	—	.79
10 barrel lots.....gal.	—	—	.82
Boiled, 3-bbl. lots.....gal.	—	—	.84
Double boiled.....gal.	—	—	.85
Rew, tanks.....gal.	—	—	.75
English, Shipments, bbls.....gal.	.70	—	.72
Olive, denatured.....gal.	1.12	—	1.15
Edible.....gal.	1.80	—	2.10
*Foots, Spot bbls.....lb.	.09	—	.09 1/4
Shipment, bbls.....lb.	—	—	.09
Palm Lagos, casks.....lb.	.08 1/4	—	.08 1/2
Bonny Old Calabar.....lb.	.07 1/4	—	.07 3/4
Niger.....lb.	.06 1/2	—	.06 3/4
Palm Kernel, domestic.....lb.	—	—	—
Imported.....lb.	.08 1/4	—	.09
Peanut Oil, refined.....lb.	.12 1/2	—	.13
Crude, f.o.b. mills tanks.....lb.	.10 1/2	—	.11
*Oriental, coast, tanks.....lb.	.11 1/4	—	.12 1/2
*Crude, Bbls, spot.....lb.	—	—	.11 1/2
Perilla, c.i.f. N. Y., bbls.....lb.	—	—	.11
Bbls., N. Y.....lb.	.12	—	.12 1/2
Poppy Seed.....gal.	—	—	—
Rapeseed, ref'd bbls.....gal.	.83	—	.85
Blown, bbls., 8 lbs.....gal.	.92	—	.95
Sesame, domestic, edible.....gal.	1.15	—	1.20
*Imported.....lb.	—	—	.09 1/4
Soya Bean, tanks Coast, Mar.....lb.	—	—	.09 1/2
C.i.f. In Bond.....lb.	.06 1/2	—	.06 3/4
New York, bbls., crude.....lb.	.10 1/2	—	.10 3/4
Edible.....lb.	.11 1/2	—	.12 1/4
Teaseed, crd., bbls.....lb.	.12	—	.12 3/4
Walnut, Crude.....lb.	.09 1/2	—	.10

OIL CAKE AND MEAL

Cottonseed Cake, f.o.b. Texas..	—	—	—
f.o.b. New Orleans.....	—	—	—
Cottonseed, Meal, f.o.b. Atlanta	—	—	—33.00
Columbia.....	—	—	—
New Orleans.....	—	—	—
Corn Cake.....	—	—	—
Meal Chicago.....	—	—	—30.00
Linseed cake, dom.....	—	—	—48.00
Linseed Meal.....	—	—	—50.00
*Nominal	—	—	—51.00

Naval Stores

(Carloads ex-deck)

Spirits Turpentine, in bbls.....gal.	.87	—	.87 1/2
Wood Turpentine, steam dis-	—	—	—
tilled, bbls.....gal.	—	—	—
Destructive distilled, bbls.....gal.	—	—	—
Pitch Prime.....bbl.	—	—	6.00
Rosins, B.....	—	—	5.15
D.....	—	—	5.20
E.....	—	—	5.20
F.....	—	—	5.20
G.....	—	—	5.20
H.....	—	—	5.20
I.....	—	—	5.20
K.....	—	—	5.50
L.....	—	—	6.25
M.....	—	—	6.60
N.....	—	—	7.00
WG.....	—	—	7.50
WW.....	—	—	37
Rosin Oil, first run.....gal.	.36	—	.37
Second run.....gal.	.38	—	.39
Tar, kiln-burnt.....bbl.	—	—	10.00
Retort.....bbl.	—	—	9.00

Fertilizer Materials

*Ammon. Sulf. bulk.....100 lbs.	—	—	2.90
Double bgs., f.a.s., N.Y. 100 lbs.	—	—	3.25
Blood, dried, f.o.b. N.Y.....unit	4.00	—	4.15
Bone, 3 and 50, ground, raw.....ton	—	—	30.00
Raw, Chicago.....ton	—	—	25.00
Cyanamide wks.....unit	—	—	2.75
Fish Scrap, dom., dried, f.o.b.	—	—	—
works.....unit	3.40	&	10
Nitrate Soda.....100 lbs.	2.85	—	2.90
Tankage, high-grade, f.o.b.	—	—	—
Chicago.....unit	3.35	&	10
Ground, N. Y.....unit	3.85	&	10

Phosphate Rock—F.o.b. Mines	—	—	—
Florida pebble, 68-72%.....ton	5.00	—	7.30
Tennessee, 78-80 p.c.....ton	8.00	—	8.00
Phosphate, Acid, 16 p.c.....ton	9.00	—	11.00
Potassium muriate, 80 p.c.....unit	.60	—	.65
Sulfate.....unit	—	—	1.00
Steamed Bone Meal, N.Y.....ton	—	—	30.00

Metals

Aluminum 98-99% Virgin.....cwt.	17.50	—	18.50
Remelted, Scrap.....cwt.	.08 1/4	—	.08
Antimony, Jap. & Chinese.....cwt.	4.35	—	4.65
Bismuth, (See Fine Chemical Prices)	—	—	—
Cadmium.....lb.	1.00	—	1.10
Cobalt.....lb.	3.00	—	3.25
Copper prime Lake.....cwt.	13.00	—	13.12 1/2
Electrolytic.....cwt.	—	—	12.87 1/2
Casting.....cwt.	—	—	12.62 1/2
Graphite, crude, Amorphous.....ton	15.00	—	42.50
Flake.....lb.	.02	—	.06 1/4
Iridium.....oz.	150.00	—	160.00
Lead, N. Y.....cwt.	4.75	—	4.80
Magnesium, 99 p.c.....lb.	—	—	1.25
Manganese ore.....unit	24 1/2	—	.26
Mercury.....flask	49.00	—	50.00
Nickel Ingot.....cwt.	—	—	41.00
Shot.....cwt.	—	—	43.00
Electrolytic.....cwt.	—	—	45.00
Palladium.....oz.	51.00	—	55.00
Platinum, pure.....oz.	—	—	90.00
Silver.....oz.	—	—	.99 1/4
Foreign.....oz.	—	—	.66 1/2
Tin Straits.....cwt.	—	—	29.00
American, pure.....cwt.	—	—	28.75
99 p.c. pure.....cwt.	—	—	28.50
Tungsten, ore per short ton unit	—	—	1.85
Wolframite, Chinese.....	—	—	2.00
Bolivian.....	—	—	2.75
Scheelite, Amer.....	—	—	—
Japanese.....	—	—	—
Zinc (Spelter) Shipment.....cwt.	4.95	—	5.00
Spot.....cwt.	—	—	—

NICHOLS COPPER CO.

Refiners of Copper

Manufacturers of



Copper Sulphate

(Blue Vitriol)

Guaranteed 99% Pure

Its high copper content makes for economy
and the best service.

25 BROAD STREET, NEW YORK

Telephone Broad 2620

Cable "ACIDSMELL"

SOLVAY

STANDARD IN
SODA
SINCE 1881

58% Light	58% Dense
CAUSTIC SODA	
76% Solid and Ground	60% Special
74% Solid and Ground	70% Special
76% Flake	70% 60%
CAUSTIC ASH (Super Alkali)	
15% 25% 36% 45%	
TANNERS' ALKALI	
BICARBONATE OF SODA	
CROWN FILLER (Paper Finisher)	
CALCIUM CHLORIDE	
TEXTILE SODA	TANNERS' SODA
LAUNDRY SODA	CLEANSING SODA
SNOW FLAKE CRYSTALS (Sesquicarbonate of Soda)	

THE SOLVAY PROCESS CO.

Plants at
SYRACUSE, N. Y.
DETROIT, MICH. HUTCHINSON, KANS.
WING & EVANS, INC., Selling Agents
NEW YORK, 22 William St.
Boston, 89 State St. Chicago, 30 N. Dearborn St.
Detroit, 625 Book Bldg. Pittsburg, 331 Fourth Ave.

Crude Drugs

Crude Drugs

MISCELLANEOUS

Agar Agar, No. 1.....lb.	1.00	— 1.10
No. 2 .....	.80	— .85
No. 3 .....	.58	— .65
Agaric, white	—	— 1.35
Almonds, bitter	—	— .30
Sweet	—	— .35
Meal .....	.28	— .30
Ambergris, black	—	— 8.00
Grey	—	— 25.00
Areca Nuts .....	.08	— .08½
Powdered	—	— .12
Balm of Gilead Buds.....lb.	.45	— .50
Burgundy Pitch, Dom..... lb.	—	— .05
Cantharides, Chinese, cases..lb.	—	— 1.15
Powdered	—	— 1.25
Russian, whole	—	— 2.50
Powdered	2.65	— 2.75
Cascara Amarga, 150 lb. baleslb.	—	— .40
Castoreum	—	— 4.00
Charcoal Willow, pd. bbls..lb.	.06	— .07
Wood, powdered .....	.04	— .04½
Civet	2.75	— 2.80
Cocineal, U.S.P. ....lb.	.40	— .50
Colocynth, Apples .....	.24	— .25
Pulp, U.S.P. ....lb.	.37	— .40
Spanish Apples .....	.28	— .30
Cuttlefish Bone, Trieste.....lb.	.18	— .20
Jewelers, large .....	.60	— .70
Small .....	.60	— .70
French .....	.18	— .20
Powdered	—	— .14
Dragon's Blood, Mass.....lb.	—	— .45
Reeds .....	.68	— .70
Ergot, Russian	1.00	— 1.05
Spanish, 200 lb. bags .....	.12	— .13
Grains of Paradise.....lb.	—	— .80
Guarana	—	— .11
Honey Calif. ....lb.	—	— .11

Hops, N. Y., prime.....lb.	.23	— .26
Pacific Coast, prime.....lb.	.23	— .26
Isinglass, American (see Agar Agar)	—	— 9.00
Russian	—	— 3.25
Kamala	—	— .04
Kola Nuts, West Indies.....lb.	.04	— .05
Leeches	—	— 10.00
Lime Juice, clarified.....gal.	.55	— .70
Lupulin	—	— 1.25
Lycopodium, 22 lb. boxes...lb.	1.05	— 1.10
Manna, large flake	—	— .85
Small flake .....	.50	— .52
Sorts	—	— .45
Moss, Iceland .....	.08	— .09
Irish, Bleached .....	.09	— .10
Musk, pods, Cabardine.....oz.	16.00	— 17.00
Tonquin	17.00	— 19.00
Grain, Cab. ....oz.	25.00	— 26.00
Tonquin	32.00	— 33.00
Synthetic, See Aromatic Chemicals	—	—
Nutgalls, Chinese .....	.16	— .17
Aleppy .....	.13	— .14
Nux Vomica, buttons, bgs...lb.	.06	— .07
Powdered, bbls. ....lb.	.11	— .12
Quassia Chips	—	— .09
Sandalwood, Chips	—	— .35
Ground	—	— .40
Scammony, resin	—	— 1.25
Spermacti, blocks .....	.30	— .31
Storax, liquid, tech.....lb.	1.10	— 1.20
Gen., U.S.P. ....lb.	—	— 1.30
Tamarinds, bbls. ....lb.	.03	— .03½
Kegs	—	— 3.00
Tar, Barbadoes	1.25	— 1.40
Turpentine, Venice, True....lb.	.45	— .50
Artificial .....	.09	— .11
Spirits, See Naval Stores	—	—
Nominal	—	—

BALSAWS

Copaiba, Para	lb.	.25	— .26
South American	lb.	.30	— .31
Fir, Canada	gal.	10.75	—11.00
Oregon, bbls., cans.....gal.		1.25	— 1.40
Peru	lb.	—	— 2.25
Tolu	lb.	.50	— .60

BARKS

Angostura	lb.	—	— .25
Basswood Bark, pressed.....lb.		—	— .14
Barberry (tree)	lb.	—	— .25
Bayberry	lb.	—	— .12
Blackhaw of Root	lb.	.24	— .22
of Tree	lb.	.16	— .17
Buckthorn	lb.	.06½	— .07
Canella alba	lb.	.50	— .55
Cascara Sagrada	lb.	.11	— .15
Cascarilla, quills	lb.	—	— .35
Siftings	lb.	.20	— .24
Chestnut	lb.	—	— .09
Cinchona, Red quills.....lb.		.45	— .55
Broken	lb.	.15	— .20
Yellow U.S.P. ....lb.		.16	— .18
Condurango	lb.	.07	— .08
Cotton Root	lb.	—	— .14
Cramp (so-called)	lb.	—	— .09
Cramp (true)	lb.	.40	— .42
Dogwood, Jamaica	lb.	—	— .09
Elm, Select, bbls. ....lb.		.25	— .27
Grinding	lb.	.12	— .14
Powdered	lb.	.14	— .18
Fringe Tree	lb.	.20	— .21
Hemlock	lb.	—	— .06
Lemon Peel	lb.	.08	— .08½
Mezereon	lb.	.10	— .11
Oak, red	lb.	.05	— .06
White	lb.	.05	— .06



Epsom Salt

For Manufacturing Purposes

Manufacturers who use Epsom Salt can now obtain a special grade at a lower price.

The siftings from our regular U. S. P. are just as white and dry; in fact, conform to our regular U. S. P. standard, except in the size of crystal. The chemical analysis of the manufacturing grade is identical with U. S. P. material.

Please note that the only difference is in structure of the crystal—that the manufacturer's grade is available only because the high "Dow" standard for U. S. P. material sifts out the smaller particles to be sold separately.

Our manufacturing grade of Epsom Salt is packed in 300-lb. barrels; 125-lb. kegs; 150-lb. bags, and 100-lb. bags.

Manufacturers of pharmaceutical preparations using Epsom Salt, also of stock remedies and similar preparations, should write us for representative samples and prices, stating quantity used.

THE DOW

Midland, Mich.



CHEMICAL CO.

90 West St., New York

Crude Drugs

SHELLAC

D. C. ....lb.	—	—	.93
Fine Orange ....lb.	—	—	.88
Second Orange ....lb.	—	—	.85
T. N. ....lb.	—	—	.84
Ground reg. ....lb.	—	—	.92
Regular bleached ....lb.	—	—	.95
Bone Dry ....lb.	—	—	.98

LEAVES AND HERBS

Aconite ....lb.	.28	—	.30
Balmory ....lb.	—	—	.14
Belladonna ....lb.	.11	—	.14
Boneset, leaves and tops....lb.	—	—	.09
Buchu, Short ....lb.	—	—	.95
Long ....lb.	—	—	—
Cannabis, true, imported....lb.	—	—	—
American, (no assay)....lb.	—	—	.20
U.S.P. ....lb.	—	—	.30
Catnip ....lb.	.10	—	.15
Chestnut ....lb.	—	—	.06
Chiretta ....lb.	—	—	.20
Coca, Huanuco ....lb.	—	—	—
Truxillo ....lb.	—	—	.35
Coltsfoot ....lb.	—	—	.08
Corn Silk ....lb.	—	—	.05½
Damiana ....lb.	.09½	—	.10
Deer Tongue ....lb.	—	—	.08
Digitalis ....lb.	.08	—	.09
Eucalyptus ....lb.	—	—	.05½
Euphorbia Pilulifera ....lb.	.10	—	.12
Grindelia Robusta ....lb.	.09	—	.10
Henbane ....lb.	.22	—	.23
Henna ....lb.	.17	—	.18
Horehound ....lb.	.08	—	.09
Jaborandi ....lb.	.34	—	.35

Laurel ....lb.	.08½	—	.04½
Life Everlasting ....lb.	.06	—	.07
Liverwort ....lb.	—	—	.25
Lobelia ....lb.	.09	—	.10
Matico ....lb.	—	—	.30
Marjoram, German ....lb.	.22	—	.23
French ....lb.	.12	—	.14½
Motherwort Herb ....lb.	—	—	.11
Patchouli ....lb.	.30	—	.35
Pennyroyal ....lb.	.08	—	.14
Peppermint, American ....lb.	.14	—	.20
Pichi ....lb.	—	—	.10
Prince's Pine ....lb.	—	—	.15
Plantain ....lb.	—	—	.15
Pulsatilla ....lb.	—	—	.45
Queen of the Meadow....lb.	—	—	.06½
Rose, pale and red....lb.	.25	—	.30
Rosemary ....lb.	.04½	—	.05
Rue ....lb.	—	—	.25
Sage, Dalmatian ....lb.	.05½	—	.06½
Greek ....lb.	.03	—	.04
Spanish ....lb.	.03	—	.04
Savory ....lb.	.10	—	.10½
Senna, Alex. whole, cases....lb.	.28	—	.35
Half Leaf, 350 lb. bales....lb.	.15	—	.16
Siftings ....lb.	.09½	—	.10
Powdered ....lb.	.12	—	.13
Tinnevelly, Jobbing ....lb.	.12	—	.14
Grinding ....lb.	.04	—	.06
Pods ....lb.	.06	—	.06½
Powdered ....lb.	.08	—	.09
Sideritis, cut ....lb.	—	—	.19
Skullcap, Western ....lb.	—	—	.20
Spearmin, American ....lb.	—	—	.24
Squaw Vine ....lb.	.14	—	.15
Stramonium ....lb.	.09	—	.10
Tansy ....lb.	.16	—	.18
Thyme Spanish ....lb.	.07½	—	.08
French ....lb.	—	—	.09
Uva Ursi ....lb.	—	—	—
Witch Hazel ....lb.	—	—	.09
Wormwood, imported ....lb.	.10	—	.12
Yerba Santa ....lb.	.11	—	.12

ROOTS

Aconite, U.S.P. ....lb.	.20	—	.25
Aletris (Unicorn true)....lb.	.30	—	.32
Alkanet ....lb.	.10	—	.12
Althea, cut ....lb.	.11	—	.12
Whole ....lb.	.08	—	.08½
Angelica American ....lb.	.15	—	.16
Arnica ....lb.	.25	—	.28
Arrowroot, American, powd....lb.	.05	—	.06
St. Vincent, powd., bbls....lb.	.06	—	.08
Bamboo Brier ....lb.	—	—	.05
Bearsfoot ....lb.	—	—	.05
Belladonna ....lb.	.12	—	.14
Berberis Aquifolium ....lb.	—	—	.17
Beth ....lb.	—	—	.17
Blood ....lb.	.14	—	.15
Blueflag ....lb.	.25	—	.28
Bryonia ....lb.	.10	—	.12
Burdock ....lb.	.10	—	.11
Calamus, bleached ....lb.	—	—	.50
Unbleached, natural ....lb.	.10	—	.11
Cohosh, black ....lb.	.08	—	.09
Blue ....lb.	.08½	—	.09
Colchicum ....lb.	.13	—	.15
Colombo, whole ....lb.	—	—	.04
Comfrey ....lb.	.20	—	.22
Culver's ....lb.	.17	—	.18
Cranesbill ....lb.	.12	—	.13
Dandelion, Imported ....lb.	.08	—	.09
Doggrass, U.S.P., cut ....lb.	.14	—	.15
Echinacea ....lb.	—	—	.35
Elecampane ....lb.	—	—	.10
Galangal ....lb.	—	—	.08
Gelsemium ....lb.	—	—	.12
Gentian ....lb.	.08	—	.09

N. Y. Q. PRODUCTS

Acetanilide, U. S. P.
Bismuth Subnitrate and
other Bismuth Salts
Codeine and its Salts
Creosote, U. S. P.
Creosote Carbonate, U. S. P.
Diacetyl-Morphine
Glycerophosphates
Hexamethylenamine
Iodoform
Mercurials (Hard)
Morphine and its Salts
Opium Powder, U. S. P.
Opium Gran., U. S. P.
Potassium Iodide

From the raw herbs, oils and roots used by the prehistoric "medicine man" to the refined products now supplied to druggists and physicians by N.Y.Q., the gap of progress is so wide as hardly to be conceivable. Yet the results measured in the absolute purity, dependability and quality of N. Y. Q. chemicals—have been well worth centuries of effort.

The New York Quinine & Chemical Works, Inc.
135 William St., New York St. Louis Depot: 18 So. Broadway

N. Y. Q. PRODUCTS

Quinine and its Salts
Silver Nucleinate
Silver Proteinate
Sodium Benzoate
Strychnine and its Salts
Thymol Iodide

There can be no higher degree of purity than that which is presented to you under the label of



Do You Want European Business?

THE REVUE DE PRODUITS CHIMIQUES has the largest circulation of any chemical paper in Western Europe. Its rates are reasonable and it is read by the people you want to sell. For information address:

54 Rue de Turbigo, Paris, France.

Seeds and Spices

Ginger, Jamaica .....lb. .28 — .40	Senega .....lb. 1.00 — 1.25	Foenugreek, 200 lb. bags.....lb. .03½ — .04
See Spices	Serpentaria .....lb. .95 — 1.00	Hemp, Manchurian .....lb. .04 — .04½
Ginseng, Cultivated .....lb. 1.00 — 3.00	Skunk Cabbage .....lb. .18 — .20	Chilian .....lb. — —
Northwestern wild .....lb. 6.00 — 8.00	Snake, Canada natural .....lb. — — .30	Job's Tears, white .....lb. — — .07½
Southern wild .....lb. 5.00 — 7.00	Stripped .....lb. — — .45	Larkspur .....lb. — — .17
Gold Seal .....lb. — — 3.25	Spikenard .....lb. .17 — .18	Lobelia .....lb. — — .70
Powdered .....lb. 3.60 — 3.75	Squill, white .....lb. .04 — .04½	Mustard, Bari, Brown.....lb. .06 — .06½
Hellebore, Black, Powd.....lb. — — .20	Stillingia .....lb. — — .09	Bombay, Brown .....lb. — — .06
White .....lb. — — .12	Stone .....lb. — — .10	California, Brown .....lb. .05½ — .05¾
Powdered .....lb. — — .14	Turmeric Madras .....lb. .05¾ — .06	Yellow .....lb. — — .06½
Helonias (Unicorn false).....lb. .45 — .48	Aleppy .....lb. .05¾ — .06	Chinese, Yellow .....lb. .03½ — .04
Ipecac Cartagena .....lb. — — 1.75	China .....lb. .05¾ — .06	English, Yellow .....lb. .06½ — .07
Powdered .....lb. — — 2.00	Unicorn false, See Helonias	Danish, Yellow .....lb. .06½ — .06¾
Rio whole .....lb. 1.90 — 2.00	True. See Aletris	Dutch, Yellow .....lb. .05½ — .06½
Powdered .....lb. — —	Valerian, Belgian .....lb. — — .10	Poppy, Dutch .....lb. .14½ — .15
Jalap, whole .....lb. .15 — .17	Yellow Dock .....lb. — — .15	Turkish .....lb. .06 — .08
Powdered, U.S.P. ....lb. .22 — .24	Yellow Parilla .....lb. — — .30	Blue Indian .....lb. .08½ — .09½
Kava Kava .....lb. — — .17		White Indian .....lb. — — .07½
Lady Slipper .....lb. .65 — .70		Quince .....lb. 1.55 — 1.60
Licorice, *Russian, cut ....lb. — —		Rape South Amer.....lb. .04 — .04½
Spanish natural bales.....lb. .06 — .06½		Japanese, small .....lb. .06½ — .06¾
Selected .....lb. .22 — .28		Sabadilla .....lb. — — .10
Powdered, 250 lb. bbls.....lb. .09 — .10		Stavesacre .....lb. — — .35
Lovage .....lb. .38 — .45		Stramonium .....lb. .13 — .14
Manaca .....lb. — — .20		Strophanthus, Hispidus ....lb. — —
Mandrake .....lb. .12 — .13		Kombe .....lb. — — .35
Musk, Russian .....lb. — —		Sunflower, domestic .....lb. .06 — .06½
Orris, Florentine bold.....lb. .08 — .09		South American .....lb. .04½ — .05
Verona .....lb. .05 — .06		Worm, American .....lb. .10 — .11
Powdered .....lb. .08 — .10		*Levant .....lb. 1.75 — 1.80
Fingers .....lb. .80 — .85		
Pareira Brava .....lb. .23 — .25		
Pellitory .....lb. — — .08		
Pink true .....lb. .75 — .80		
Pleurisy .....lb. — — .19		
Poke .....lb. — — .07		
Rhatany .....lb. .10 — .11		
Rhubarb, H. D., 350 lb. cases.....lb. .80 — .85		
Powdered .....lb. — — 1.00		
Sarsaparilla, Honduras .....lb. — — .50		
Mexican .....lb. — — .45		
Scammony Root .....lb. .05 — .06		

SEEDS

SPICES

QUALITY SERVICE

B.G. FEINBERG

111-WATER STREET
NEW YORK CITY

BROMIDES

POTASH SODA

BARIUM NITRATE
PERMANGANATE OF POTASH
CARBON TETRACHLORIDE

TRUTH VALUE

Benzyl Benzoate C. P.
(MEDICINAL)

accepted by the Council of Pharmacy and Chemistry
A Standard Medicinal Brand

Manufactured By

VAN DYK & COMPANY

Incorporated 1904

4-6 Platt St., New York

We offer for PROMPT Delivery

BRUCINE SULPHATE

(suitable for Formula No. 40)

SCAMMONY RESIN

ROCHELLE SALTS

POTASSIUM SULPHO-GUAIACOLATE

GUAIACOL CARBONATE

STRYCHNINE SALTS

MERCURIALS, etc.

MAY & BAKER, LTD.

Manufacturing Chemists and Exporters

BATTERSEA, LONDON

ENGLAND

Cable Address: BISMUTH, LONDON

Rice Starch

(Since '73)

M. L. BARRETT & CO. Merchants

Essential Oils [Fine Chemicals Synthetics Colors

233 WEST LAKE STREET

CHICAGO, ILL.

Established 1873

Cables: Lazarno

Essential Oils

Essential Oils

Cloves, Zanzibar, 135 lb. bale	lb.	.31 1/2	.32
Amboyas	lb.	.60	.65
Penang	lb.	.09 1/4	.10
Ginger, African	lb.	.29	.39
Jamaica, grinding	lb.	.38	.40
Fancy Bold	lb.	.09 1/4	.09 1/2
Japan	lb.	.10	.10 1/2
Cochin ABC and lemon	lb.	.37	.38
Mace, Siau	lb.	.45	.46
Banda, No. 1	lb.	.29	.30
Batavia	lb.	.21	.22
Nutmegs, 110s	lb.	.27	.28
Pepper, Black Sling	lb.	.10 1/4	.10 1/2
White	lb.	.13 1/4	.13 1/2
Peppers, Red, Mombasa	lb.	.32	.33
Cherries	lb.	.19 1/2	.20
Bombay	lb.	.16	.16 1/4
Japan	lb.	.40	.42
Pimento, Select	lb.	—	.04 1/2

WAXES

Bayberry	lb.	.19 1/4	.22
Bees, white	lb.	.33	.35
Yellow, clean	lb.	.16	.18
Crude	lb.	.14 1/4	.17
Candelilla	lb.	.24	.25
Carnauba	lb.	.55	.58
No. 1, North Country	lb.	.46	.48
No. 2, North Country	lb.	.25	.26
No. 3, Fatty Gray	lb.	.15	.16
No. 3, Chalky	lb.	.14 1/4	.15
Ceresin Yellow	lb.	.07 1/4	.08
White	lb.	.09	.09 1/4
Japan	lb.	.17	.18
Montan, crude	lb.	.04 1/4	.05
"Bleached	lb.	—	.20
Onkerite, brown	lb.	.22	.24
Green	lb.	—	—
Refined, yellow	lb.	—	—
Paraffin, ref'd 128-130 deg. m.p.	lb.	.03 1/4	.04 1/4
Ref'd 118-120 deg.	lb.	.03 1/4	.03 1/2
Stearic Acid, See Animal Oils			
Formal			

Almond, Bitter, U.S.P.	lb.	4.75	— 5.00
Bitter, f.f. P.A.	lb.	5.25	— 5.50
Artificial, U.S.P., See Aromatic Chems.			
Sweet	lb.	.50	— .60
Peach Kernel (Apricot)	lb.	.25	— .27
Amber, Crude	lb.	1.00	— 1.05
Rectified	lb.	1.25	— 1.30
Anise Tech., 16 2-3 lb. cans.	lb.	.50	— .55
U. S. P.	lb.	.60	— .65
Bay	lb.	2.25	— 2.30
Bergamot, 25 lb. coppers	lb.	4.80	— 5.00
Artificial	lb.	2.50	— 2.75
Birch Tar, Rect.	lb.	—	2.75
Crude	lb.	—	1.85
Bois de Rose	lb.	2.75	— 3.25
Cade	lb.	.50	— .60
Cajuput, Native	lb.	.65	— .70
U.S.P.	lb.	.75	— .80
Camphor, by-product	lb.	.10	— .10 1/4
Japanese white	lb.	.19	— .20
Cananga, Native	lb.	2.75	— 3.00
Rectified	lb.	4.00	— 4.25
Caraway, Rectified	lb.	—	2.25
Crude	lb.	—	1.90
Cassia Technical, 75-95 p.c.	lb.	1.20	— 1.40
Redistilled, U.S.P.	lb.	1.60	— 1.65
Cedar Leaf	lb.	.70	— .72
Cedar Wood, light	lb.	.30	— .32
Cinnamon, Ceylon, heavy	lb.	11.00	— 15.00
Leaf	lb.	—	2.00
Citronella, Ceylon	lb.	.55	— .56
Java	lb.	—	.75
Cloves, cans	lb.	2.15	— 2.25
Bottles	lb.	2.25	— 2.30
Copaiba, U.S.P.	lb.	.40	— .45
Coriander, U.S.P.	lb.	8.50	— 9.00
Croton	lb.	—	1.10
Cubebs, U.S.P.	lb.	6.25	— 6.50
Cumin	lb.	4.75	— 5.00
Dill	lb.	—	4.00

Erigeron	lb.	1.75	— 1.90
Eucalyptus, Australian, U.S.P.	lb.	.38	— .40
Fennel, sweet, U.S.P.	lb.	1.65	— 1.70
Geranium, Rose Algerian	lb.	7.00	— 8.00
Bourbon, (Reunion)	lb.	5.00	— 5.50
Turkish	lb.	—	4.25
Ginger	lb.	6.00	— 6.50
Gingergrass	lb.	—	2.75
Hemlock	lb.	—	.85
Juniper Berries, rect.	lb.	1.40	— 1.50
Wood	lb.	.50	— .55
Lavender Flowers, U.S.P.	lb.	3.00	— 3.50
Spike, Spanish	lb.	.85	— .90
Lemon, U.S.P., 25 lb. cop.	lb.	.85	— .90
Lemongrass, Native	lb.	1.00	— 1.10
Limes, Expressed	lb.	2.25	— 2.50
Distilled	lb.	.50	— .55
Linaloe	lb.	2.60	— 2.70
Mace, distilled	lb.	1.10	— 1.15
Mirbane, ref., see Aromatic Chemicals			
Mustard, natural, 1 lb. bot.	lb.	—	17.00
Artificial	lb.	—	3.00
Neroli, Bigarade	oz.	8.00	— 20.00
Petale	oz.	10.00	— 25.00
Artificial	lb.	—	15.00
Nutmeg, U.S.P.	lb.	1.10	— 1.15
Orange, bitter	lb.	—	2.25
Sweet, West Indian	lb.	2.60	— 2.70
Italian, 25 lb. cop.	lb.	3.00	— 3.25
Origanum, Cans	lb.	.25	— .30
Patchouli	lb.	10.00	— 12.50
Pennyroyal, domestic	lb.	—	1.75
Imported	lb.	1.15	— 1.25
Peppermint Natural, tins	lb.	1.80	— 2.00
Redistilled, U.S.P.	lb.	2.00	— 2.20
Japanese, thrice rect.	lb.	1.25	— 1.30
Petit Grain, So. America	lb.	1.75	— 1.90
French	lb.	8.50	— 10.00
Pinus Sylvestris	lb.	—	1.75
Pumilio, U.S.P.	lb.	—	3.00
Rose, French	oz.	—	10.00
Bulgarian	oz.	7.50	— 8.50
Artificial	oz.	2.50	— 3.00

Essential Oils

and

Aromatic Chemicals

for

PERFUMES, SOAPS,

FLAVORING

EXTRACTS

Morana Incorporated

Importers and Manufacturers

GENERAL OFFICES:

118 East 27th St., New York City

CHICAGO:
19 S. LA SALLE ST.

WORKS:
ELIZABETH, N. J.

OILS

ESSENTIAL

OILS

AND

Aromatic Chemicals

Manufacturers
Importers
Exporters

Correspondence Solicited

FRITZSCHE BROTHERS

Inc.

NEW YORK

Aromatic Chemicals

Rosemary, U.S.P. ....lb.	.55	— .60
Tech. ....lb.	.45	— .50
Sandalwood, East Indian....lb.	—	7.25
West Indian ....lb.	—	4.00
Sassafras, natural, 50 lb. cans....lb.	—	.90
Artificial ....lb.	.46	— .48
Savin ....lb.	4.00	— 4.25
Spearmint ....lb.	2.40	— 2.50
Spruce ....lb.	—	.85
Tansy, Amer. ....lb.	—	9.00
Tar, bbls. ....gal.	.28	— .30
Refined, U.S.P., cans....gal.	—	1.00
Thyme, red, U.S.P. ....lb.	1.00	— 1.10
White, U.S.P. ....lb.	1.15	— 1.20
Vetivert, Bourbon ....lb.	4.75	— 5.25
Wine, heavy ....lb.	—	2.75
Wintergreen, sweet birch....lb.	2.25	— 2.50
Genuine Gaultheria ....lb.	5.00	— 7.00
Synthetic, U.S.P., bulk....lb.	.35	— .40
Wormseed Baltimore ....lb.	3.85	— 4.00
Wormwood Dom. ....lb.	11.75	— 12.00
Ylang Ylang, Bourbon....lb.	10.00	— 12.00
Manila ....lb.	22.50	— 30.00
Artificial ....lb.	—	10.00

Oleoresins

Aspidium (Malefern) ....lb.	3.50	— 4.00
Capsicum ....lb.	2.50	— 2.75
Cubeb ....lb.	—	7.00
Ginger ....lb.	2.75	— 3.00
Malefern ....lb.	3.50	— 4.00
Mullein (so-called) ....lb.	—	4.00
Orris ....lb.	—	18.00
Pepper, black ....lb.	—	5.00
Vanilla ....lb.	8.50	— 9.50

Perfumers' Sundries

Almond Meal ....lb.	.28	— .30
Ambergris, black ....oz.	—	8.00
Ambergris, gray ....oz.	—	25.00
Chalk, precipitated ....lb.	.0234	— .0312
Civet ....oz.	2.75	— 3.00
Lanolin hydrous ....lb.	.12	— .15
Lanolin anhydrous ....lb.	.14	— .15
Musk Cab., pods....oz.	16.00	— 17.00
Musk Cab., grains....oz.	25.00	— 26.00
Musk, Tonquin, grains....oz.	32.00	— 33.00
Musk, Tonquin, pods....oz.	17.00	— 19.00
Oak Moss ....lb.	.40	— .50
Orris Root, Florentine, wholelb.	.081/2	— .09
Verona ....lb.	—	.07
Powdered, Gran. ....lb.	.08	— .12
Rice Starch ....lb.	.06	— .08
Sandalwood, chips and ground lb.	.35	— .40
Talc, Italian ....ton	38.00	— 40.00
Talc, French ....ton	20.00	— 25.00
Talc, domestic ....ton	17.00	— 18.00

Aromatic Chemicals

Natural Derivatives

Anethol ....lb.	—	1.75
Borneol ....lb.	—	3.50
Citronellol ....lb.	10.00	— 14.00
Citral ....lb.	3.00	— 3.50
Eucalyptol ....lb.	.80	— .82
Eugenol ....lb.	3.25	— 3.50
Geraniol ....lb.	2.50	— 3.00
Iso-Eugenol ....lb.	4.00	— 4.50
Linalool ....lb.	4.50	— 5.50
Menthyl ....lb.	6.25	— 6.40
Rhodinol ....lb.	—	15.00
Safrol ....lb.	.55	— .60

Synthetic Aromatics

Acetophenone, C.P. ....lb.	3.50	— 3.50
Amyl Butyrate ....lb.	—	2.50
Amyl Salicylate ....lb.	1.20	— 1.20
Anisic Aldehyde ....lb.	—	4.25
Benzaldehyde, U.S.P. ....lb.	1.40	— 1.50
Free From Chlorine ....lb.	1.60	— 1.70
Benzylacetate ....lb.	1.20	— 1.25
Benzyl Alcohol ....lb.	1.10	— 1.25
Benzyl Benzoate ....lb.	1.35	— 1.50
Benzyl Formate ....lb.	3.50	— 3.75
Bromstyrol ....lb.	—	4.00
Cinnamic Acid ....lb.	—	3.00
Cinnamic Aldehyde ....lb.	—	4.50
Citronellal ....lb.	—	2.00
Coumarin ....lb.	—	3.15
Resale ....lb.	—	80
Diphenyl oxide ....lb.	—	35
Ethyl Cinnamate ....lb.	4.75	— 5.00
Geranyl Acetate ....lb.	5.25	— 5.50
Heliotropin ....lb.	2.60	— 3.00
Indol, C. P. ....oz.	—	10.00
Linalyl Acetate ....lb.	9.00	— 10.00
Linalyl Benzoate ....lb.	15.00	— 16.00
Methyl Anthranilate ....lb.	4.25	— 4.50
Methyl Cinnamate ....lb.	4.75	— 5.00
Methyl Paracresol ....lb.	9.00	— 10.00
Methyl Salicylate ....lb.	.35	— .40
Resale ....lb.	—	35
Mirbane, rect., drums extra....lb.	.10	— .11
Musk Ambrette ....lb.	13.00	— 14.00
Musk Ketone ....lb.	9.00	— 10.00
Musk Xylene ....lb.	2.25	— 2.75
Nerolin ....lb.	2.25	— 2.50
Phenylacetaldehyde ....lb.	6.00	— 9.00
Phenylacetic Acid ....lb.	3.50	— 4.00
Phenylethylalcohol ....lb.	7.00	— 9.00
Terpineol, C. P. ....lb.	.45	— .50
Vanillin ....oz.	—	35
Resale ....oz.	—	35
Violet, artificial (Itonone)....lb.	7.50	— 8.00
Yara Yara Crystals....lb.	2.25	— 2.50

CHIRIS

Essential Oils

and

Synthetic Aromatic Chemicals

PARIS



LONDON

Established in Grasse, France, 1768

Antoine Chiris Company

147-153 WAVERLY PLACE, NEW YORK, N. Y.

American Works, Delawanna, N.J.

T. FUJISAWA & CO.

Manufacturing Chemists

21 PARK ROW :: NEW YORK CITY

Telephone Barclay 7832

JAPAN REFINED

CAMPBOR

AND

MENTHOL

Main Office

Doshumachi, Osaka, Japan

Cable Address: Camphrier, Osaka
All Codes Used

Imports of Chemicals, Dyestuffs, Drugs, etc.

Imports at N. Y. from March 18 to March 25

ACIDS—Cresylic, 2 drs., McKesson & Robbins Co., Hull; 30 drs., Lunham & Moore, Rotterdam; **Tartaric**, 150 cks., W. Neuberger, Rotterdam
ALCOHOLS—105 cks., De Sola Bros. & Pardo, Curacao; 100 cks., C. F. Hernandez Sons & Co., Curacao; 100 cts., Selma Mercantile Co., Curacao; 200 cts., Suzarte & Whitney, Curacao
ALUMINUM SULFATE—83 cks., Bush, Beach & Gent, Rotterdam
AMMONIUM SALTS—Alum, 25 bbls., Arco Trading Corp., Hamburg; **Carbonate**, 12 bbls., Order, Hamburg; **Muriate**, 110 cks., Bush, Beach & Gent, Rotterdam; **Oxalate**, 1 csk., Order, Hamburg
ANATO—200 bgs., Order, Kingston; 105 bgs., Colonial Bank of London, Kingston
ANTHRACENE PITCH—270 dble. bgs., Lunham & Moore, Rotterdam
BARIUM SALTS—19 cks., Chemical National Bank, Hamburg; **Carbonate**, 200 bgs., National Park Bank, Bremerhaven; 73 cks., Superfos Co., Hamburg; **Chloride**, 19 cks., Chemical National Bank, Hamburg; **Formate**, 93 drs., J. W. Hampton, Jr. & Co., London; 36 drs., Order, Hamburg; 107 cks., W. A. Brown & Co., Rotterdam; 2 kgs., F. Boehm, Ltd., Rotterdam
BARKS—11 bbls., Cohen & Co., Nassau; 12 bbls., Peek & Velsor, Hamburg; **Cocillana**, 21 bbls., S. C. Blau, Arica; **Mangrove**, 1 bbl., Caracas Comm. Corp., Trinidad; **Siftings**, 10 bgs., Cohen & Co., Nassau
BARM—6 cks., Irving National Bank, Hamburg
BARYTES—220 bgs., O. Haase, Hamburg; 122 cks., L. A. Salomon & Bro., Hamburg; 147 cks., American Metal Transport Co., Rotterdam
BEANS—Vanilla, 3 cks., American Exchange National Bank, Colombo; 8 cks., Dodge & Olcott Co., Vera Cruz; 15 cks., Gomez & Sloan, Inc., Vera Cruz
BERRIES—Juniper, 103 bgs., Order, Leghorn
BRONZE POWDER—13 cks., P. P. Chemical Co., Bremerhaven; 24 cks., Hensel Bruckmann & Lorbacher, Bremerhaven; 33 cks., Ladenburg Thalmann & Co., Bremen; 1 csk., C. B. Richard & Co., Hamburg; 50 cks., Order, Hamburg; 6 cks., Order, Hamburg
CALCIUM SALTS—Carbide, 1,000 drs., Order, Hamburg; **Chloride**, 138 drs., Order, Hamburg; 270 drs., National American Bank, Hamburg
CASEIN—6 cks., Belgian Trading Co., Havre
CERESINE—84 bgs., W. Schall & Co., Hamburg
CHROMIUM SALTS—Fluoride, 10 bbls., Weissenhals & Co., Hamburg; **Oxide**, 4 cks., Reichard Coulston, Inc., Rotterdam
COBALT ACETATE—10 cks., Order, Hamburg
COCHINEAL—18 cks., Hagemeyer Trading Co., Marseilles
COCOA BUTTER—246 bgs., Catz American Co., Rotterdam; 263 bbls., Habicht & Co., Rotterdam; 100 bgs., Alpha Lys Co., Rotterdam; 100 bgs., Alpers & Mott, Rotterdam; 1,958 bbls., Order, Hamburg; 100 bbls., Habicht & Co., Hamburg; 10 cks., Arco Trading Corp., Hamburg; 100 bgs., Order, Hamburg; 20 bbls., Cofon Impt. Co., Hamburg; 101 bbls., F. E. Child & Bro., Hamburg; 476 bgs., Order, Hamburg; 786 bgs., Habicht & Co., Rotterdam; 33 bgs., Cosmopolitan Shipping Co., Rotterdam; 100 bgs., T. M. Duché & Sons, Rotterdam; 328 bbls., Order, Rotterdam; 799 bbls., Order, Hamburg; 322 bgs., Habicht & Co., Hamburg; 125 bgs., 86 bbls., Order, Hamburg
COLORS—3 cks., Order, Constantinople; 15 bbls., Order, Genoa; 1 csk., Equitable Trust Co., Rotterdam; 12 cks., H. A. Metz & Co., Rotterdam; 3 cks., 1 csk., Kuttroff, Pickhardt & Co., Rotterdam; 3 cks., National City Bank, Rotterdam; 2 cks., New York Color & Chemical Co., Rotterdam; 2 cks., 1 csk., Kuttroff, Pickhardt & Co., Rotterdam; 3 cks., Commonwealth Color & Chemical Co., Rotterdam; 1 csk., Franklin Import & Export Co., Rotterdam; 13 cks., W. Van Doorn, Rotterdam; 1 csk., 1 csk., Order, Rotterdam; 2 cks., Corn Exchange Bank, Rotterdam; 3 cks., Franklin Import & Export Co., Hamburg; 1 csk., Order, Hamburg; 1 csk., American Express Co., Hamburg; 56 drs., Ciba Co., Antwerp; 6 cks., 1 cylinder, Sandoz Chemical Works, Antwerp; 3 cks., New York Color & Chemical Co., Antwerp; 1 csk., American Express

Co., London; 1 pkge., Seven Seas Merc. Transport Co., London; 3 cks., Order, London; 7 cks., 4 drs., Andreykovlev & Dunk, Antwerp; 200 cks., Heemsoth Basse & Co., Havre; 80 cks., Geigy Co., Havre; 8 kgs., Commonwealth Color & Chemical Co., London; 5 bbls., Order, Genoa; 16 cks., M. Grumbacher, Hamburg; 5 cks., Ambi Industrial Wks., Hamburg; 1 csk., C. W. Sellers, Hamburg; **Alizarine**, 3 cks., Equitable Trust Co., Rotterdam; 33 cks., Kuttroff, Pickhardt & Co., Rotterdam; 1 csk., American Exchange National Bank, Rotterdam; **Bronze**, 15 cks., Gerstendorfer-Bros., Bremerhaven; 35 cks., Order, Bremerhaven; 4 cks., Gerstendorfer Bros., Bremen; 21 cks., American Express Co., Bremen; **Coal-Tar**, 7 cks., 11 cks., American Exchange National Bank, Rotterdam
DEXTRIN—500 bgs., Hall Trading Corp., Hamburg
DIVI DIVI—4,100 bgs., R. Desvernine, Curacao; 890 bgs., Eggers & Heinlein, Pompadour; **DRAGON'S BLOOD**—26 bgs., Lunham & Moore, Rotterdam
EPSOM SALT—1,200 bgs., Superfos Co., Hamburg; 490 bgs., Order, Hamburg; 1 csk., American Express Co., Hamburg
ERINOID—8 pkgs., W. B. Fox & Bros., Southampton
EXTRACTS—Logwood, 22 bbls., 20 cks., Logwood Mfg. Corp., Cape Hattien; **Rennet**, 1 csk., Bunham Chemical & Metal Corp., Hamburg; **Sesame**, 25 cks., Order, Constantinople
FLOWERS—Insect, 3 bbls., Lunham & Moore, Rotterdam; **Chamomile**, 5 bbls., Lunham & Moore, Rotterdam
GELATINE—5 cks., Cox Gelatine Co., Glasgow; 1 csk., Schick Trading Corp., Danzig; 70 bgs., Order, Hamburg; 1 csk., Pfaltz & Bauer, Hamburg; 60 bbls., S. Isaacs & Co., Marseilles; 10 cks., W. E. Miller, Havre; **Powdered**, 500 bbls., H. A. Sinclair, Rotterdam; **Sheet**, 1 csk., B. O. R. R. Co., Hamburg
GLAUBER'S SALT—250 bgs., Order, Bremen; 264 cks., Cooper & Cooper, Hamburg; 203 cks., Globe Shipping Co., Hamburg; 1,284 bgs., Globe Shipping Co., Hamburg
GUM—243 cks., Order, Bombay; **Copal**, 104 bgs., Order, Antwerp; 154 bgs., Order, London; **Karaya**, 200 bgs., Order, Bombay
Mastic, 30 cks., Ionian Bank, Ltd., Constantinople; 28 cks., Banque Comm., Constantinople; 22 cks., Bank of Athens, Constantinople; 57 cks., Ionian Bank, Ltd., Constantinople; **Persian**, 20 bgs., Order, Bombay; **Tragacanth**, 160 bgs., 167 cks., Order, Bombay
HOPS—10 bbls., E. Wattenberg Co., Hamburg; 10 cks., J. Sourensohn, Hamburg
KAINIT—226,951 kilos, A. Vogel, Hamburg; 181,411 kilos, A. Vogel, Hamburg; **Crude**, 1 lot in bulk, A. Vogel, Bremen
KATANOL—2 cks., Commonwealth Color & Chemical Co., Rotterdam
LEAVES—27 bbls., S. S. Penick & Co., Hamburg; 24 bbls., S. B. Penick & Co., Hamburg; **Buchu**, 5 bbls., Order, Southampton; **Matico**, 23 bbls., S. C. Blau, Arica; **Stramonium**, 72 bbls., Anderson Hillier Co., Hamburg; **Sumac**, 4 bbls., Order, Palermo
LICORICE—50 cks., Order, Catania
LIME CITRATE—256 cks., C. Pfizer & Co., Messina; 171 cks., Citro Chemical Co. of America, Messina
LITHOPONE—40 bbls., Alkai Chem. Corp., Hamburg; 16 bbls., A. Kramer & Co., Hamburg; 40 cks., Order, Hamburg; 4 cks., E. M. F. Waldo, Antwerp; 100 cks., A. Klipstein & Co., Antwerp
LYCOPODIUM—2 cks., Order, Danzig; 1 csk., S. S. Penick & Co., Hamburg
MAGNESITE—237 cks., Columbia Trust Co., Hamburg; **Calcined**, 570 bbls., Brown Bros. & Co., Rotterdam
MAGNESIUM SALTS—Citrate, 50 cks., Gallagher & Ascher, Genoa; **Chloride**, 202 cks., Chemical Corp., Hamburg
MANGANESE CHLORIDE—5 cks., Order, Hamburg
MYROBALANS—22,761 bgs., Order, Bombay; **Crushed**, 3,260 pkts., Stand. Bank of South America, Calcutta; **Whole**, 7,225 pkts., Stand. Bank of South America, Calcutta; 12,740 pkts., Order, Calcutta
NAPHTHALENE—228 cks., Order, Hamburg
OCHRE—824 cks., Reichard Coulston, Inc., Marseilles; **Red**, 60 cks., J. L. Smith &

Co., Hull
OILS—2 cks., Elmer & Amend, Hamburg; 250 bbls., L. G. Gillespie & Son, London; 15 cks., D. Coviello, Naples; 5 cks., General Transport Co., Naples; 5 bbls., Order, Naples; 14 cks., Bernard Judae & Co., Bordeaux; 240 cks., American Shipping Co., Bordeaux; **Castor**, 126 bbls., Canadian Pacific Railway, Hull; 168 pkgs., Netherlands Chemical Co., Hull; 100 bbls., Order, Hull; **Cresote**, 4,000 tons, Order, London; 2,000 tons, Order, Rotterdam; **Haarlem**, 20 cks., Lehn & Fink, Rotterdam; 2 cks., R. J. Godwins Sons, Inc., Rotterdam; **Linsed**, 302 bbls., African & Eastern Corp., Hull; 25 cks., Munson S. S. Line, Hull; 100 bbls., A. Kaplan, Hull; 1 bx., Elbert & Co., Hull; 1,030 bbls., Order, Hull; a quantity in bulk, Order, Hull; 40 bbls., Netherlands Chemical Co., Rotterdam; 762 bbls., Netherlands Chemical Co., Rotterdam; 282 bbls., St. Clair Oil Co., Rotterdam; 2,293 bbls., Patton Pittcairn Division Pitts Glass Co., Rotterdam; 253 bbls., American Linsed Co., Rotterdam; 184 bbls., Netherlands Chemical Co., Rotterdam; 115 bbls., American Linsed Co., Rotterdam; 150 bbls., Clements & Son, Rotterdam; 376 bbls., Clements & Son, Rotterdam; 1,913 bbls., Order, Rotterdam; 295 bbls., Order, Antwerp; **Olive**, 1 csk., 1 bbl. D. Pasquale, Naples; 3 cks., General Transport Co., Naples; 41 cks., F. Manniello, Naples; 13 cks., Hudson Forwarding & Shipping Co., Naples; 10 cks., B. Vincenzo, Naples; 4 cks., Davies Turner & Co., Naples; 1 bbl., General Transport Co., Naples; 5 cks., C. Andrews, Naples; 21 cks., G. Ascione, Naples; 19 pkgs., General Transport Co., Naples; 10 cks., Southern Pacific Co., Bordeaux; 100 cks., F. H. Leggett & Co., Bordeaux; 10 cks., E. La Montagne's, Naples; 12 cks., C. Friedenberg, Naples; 51 pkgs., General Transport Co., Naples; 4 cks., Hudson Forwarding & Shipping Co., Messina; 300 cks., Order, Leghorn; 61 cks., Order, Palermo; 119 bbls., W. Schall & Co., Algiers; 43 cks., Habicht & Co., Malaga; 100 bbls., National Bank of New York, Malaga; 50 bbls., State Bank of New York, Malaga; 400 cks., F. H. Leggett & Co., Malaga; 15 cks., 20 cks., Order, Marseilles; 320 cks., Livermore Dearborn & Co., Genoa; 250 cks., T. Plipitone, Genoa; 200 cks., I. Lionelli, Genoa; 300 cks., Luckenbach S. S. Co., Genoa; 5 cks., American Express Co., Genoa; 1,197 cks., Order, Genoa; 50 cks., G. Basciano, Naples; 11 bbls., N. Caralaga, Constantinople; 26 cks., S. Cakaldi, Constantinople; 25 cks., Colombo Co., Constantinople; 12 bbls., T. Panagiotopoulos, Constantinople; 5 bbls., M. Gatsoulis, Constantinople; 6 bbls., Bank of Athens, Constantinople; 4 bbls., Bank of Athens, Constantinople; 6 bbls., G. Bosmas, Constantinople; 533 bbls., 1 csk., Order, Constantinople; 130 cks., East River National Bank, Genoa; 50 cks., J. Munroe & Co., Genoa; 50 cks., G. Petroni, Genoa; 300 cks., E. Martini, Genoa; 400 cks., Livermore Dearborn & Co., Genoa; 250 cks., American Express Co., Genoa; 1 csk., G. H. McFadden, Genoa; 300 cks., Order, Genoa; 6 bbls., 16 cks., Hudson Forwarding & Shipping Co., Naples; **Sulfur**, 5 bbls., T. Panagiotopoulos, Constantinople; 49 bbls., Order, Naples; 300 bbls., Mechanics & Metals National Bank, Marseilles; 200 bbls., Mechanics & Metals National Bank, Naples; **Palm**, 109 cks., Rome Soap Mfg. Co., Hull; **Kernel**, 22 cks., E. E. Jones Chemical Co., Hull; **Rape**, 20 bbls., E. H. Kellogg & Co., Hull; 100 bbls., National City Bank, Hull; 1 bx., St. Clair Oil Co., Hull; 1 bx., Elbert & Co., Hull; 1 csk., Order, Rotterdam
OILS, ESSENTIAL—80 qu. cks., A. Chris & Co., Messina; 195 hlf. cks., Brown Bros. & Co., Messina; 80 cks., Order, Messina; 7 cks., Houbigant, Inc., Southampton; 13 drs., Order, Malaga; 6 cks., I. W. Lyon & Co., Rotterdam; 8 cks., Polak's Frantal Wks., Rotterdam; 4 cks., Fritzsche Bros., Hamburg; 3 cks., G. V. Gross & Co., Marseilles; 20 cks., Fritzsche Bros., Hamburg; **Almond**, 49 cks., Order, Marseilles; **Cajuput**, 25 cks., J. B. Horner & Co., Rotterdam; 25 cks., Magnus, Mabée & Reynard, Inc., Rotterdam; **Citronella**, 14 drs., Fidelity Intern. Trust Co., Colombo; 3 drs., Order, Colombo; **Orange**, 20 cks., Order, Kingston; 10 cks., Colonial Bank of London, Kingston
OPIMUM—10 cks., American Express Co., Havre

PHOSPHORUS—200 cs., Mechanics & Metals National Bank, Hamburg; 100 cs., Order, Hamburg

PIASSAVA—440 bbls., Order, Hamburg

PIMENTO—243 bgs., Canadian Bank of Commerce, Kingston; 250 bgs., Colonial Bank of New York, Kingston; 100 csks., Steinhart & Nordlinger, Alicante; 20 csks., Judson Freight Forwarding Co., Alicante; 50 csks., E. E. Marks & Co., Alicante; 50 csks., Austin, Nichols & Co., Alicante; 100 csks., Order, Alicante

PLUMBAGO—100 bbls., Order, Colombo

POTASSIUM SALTS—32 csks., P. C. Kuyper & Co., Hamburg; 32 csks., Globe Shipping Co., Hamburg; 69 csks., Roessler & Hasselacher Chemical Co., Hamburg; 10,440 bgs., Soc. Comm. des Potasses de l'Alsace, Dunkirk; **Alum**, 75 bbls., Arco Trading Corp., Hamburg; 133 csks., Blackburn Trading Corp., Hamburg; **Bromide**, 20 cs., Blackburn Trading Corp., Hamburg; 100 cs., Superfos Co., Hamburg; 50 cs., Order, Hamburg; **Carbonate**, 36 csks., P. H. Petry & Co., Bremen; 9 csks., American Woodpulp Corp., Hamburg; **Caustic**, 358 drs., National American Bank, Bremerhaven; 29 drs., Order, Hamburg; 50 drs., Peters White & Co., Hamburg; **Chlorate**, 247 drs., Order, Marseilles; 720 bbls., Mechanics & Metals National Bank, Hamburg; **Muriate**, 334 bgs., Mutual Chemical Co., Bremerhaven; 3,000 bgs., Battelle & Renwick, Bremerhaven; 2,133 bgs., American Agricultural Co., Bremerhaven; 1,822 bgs., A. Vogel, Bremen; 2,000 bgs., A. Vogel, Hamburg; 2,000 bgs., A. Vogel, Hamburg; **Nitrate**, 131 csks., Hummel & Robinson, Hamburg; **Permanganate**, 50 drs., Arco Trading Corp., Hamburg; **Prussiate**, 60 csks., Order, Hamburg; **Sulfate**, 7,001 bgs., A. Vogel, Hamburg; 1,000 bgs., A. Vogel, Hamburg; 3,500 bgs., A. Vogel, Hamburg

QUININE—3 cs., Huyck & Sons, Bordeaux; **Sulfate**, 1 cs., C. L. Huisking, Havre

ROOTS—1 bgs., Schleffelin Co., London; 8 bgs., Peck & Velsor, Hamburg; 56 bgs., Peck & Velsor, Hamburg; **Arrow**, 35 cs., J. P. Smith & Co., London; **Broom**, 193 bls., E. W. Spann, Vera Cruz; 200 bls., Parsons Trading Co., Vera Cruz; **Bulbon**, 4 cs., C. B. Richard & Co., Rotterdam; **Ipecac**, 18 bgs., R. Del Castillo & Co., Cartagena; **Jris**, 1 cse., Order, Southampton; **Licorice**, 25 cs., Order, Marseilles; **Rhubarb**, 15 cs., S. B. Penick & Co., Hamburg

ROSIN—70 csks., Eastman Kodak Co., Bordeaux; 3 csks., Order, Bordeaux

SAFFRON—3 cs., Order, Barcelona

SAFROL—4 bbls., Fritzsche Bros., Hamburg

SAL AMMONIAC—54 bbls., Kreuger & Toll Corp., Hamburg; 33 drs., Chemical National Bank, Hamburg

SANDALWOOD—Chips, 20 bls., Order, Bombay

SAPONINE—3 cs., Pfaltz & Bauer, Hamburg

SEEDS—Anise, 50 bgs., Order, Malaga; 130 csks., Order, Barcelona; **Caraway**, 150 bgs., Levy & Lewis Co., Rotterdam; 200 bgs., Halbach & Co., Rotterdam; 200 bgs., Catz American Co., Rotterdam; 100 bgs., Schilt-huis American Trading Co., Rotterdam; 150 bls., Ideal Trading Co., Rotterdam; 200 bls., W. Tappenbeck, Rotterdam; 185 bls., Starch Products Co., Rotterdam; 300 bgs., W. Van Doorn, Rotterdam; 200 bls., H. B. Epstein & Bros., Rotterdam; 175 bgs., J. J. Toledano & Co., Bordeaux; 200 bgs., Order, Bordeaux; **Cardamom**—56 cs., American Exchange National Bank, Colombo; **Castor**, 34,166 bgs., Order, Bombay; **Coriander**, 700 bgs., J. J. Toledano & Co., Bordeaux; **Cumin**, 270 bgs., Scandnavian Seed Co., Hamburg; **Fennel**, 34 bgs., Order, Marseilles; **Flax**, 35,161 bgs., L. Dreyfus & Co., Rosario; 8,260 bgs., L. Dreyfus & Co., Buenos Aires; **Mustard**, 126 bgs., Catz American Co., Rotterdam; 150 bgs., W. Van Doorn, Rotterdam; 318 csks., A. Joensson & Co., London; **Poppy**, 170 bgs., Archibald & Lewis, Rotterdam; 74 bgs., Catz American Co., Rotterdam; 63 bgs., Equitable Trust Co., Hamburg; 100 bgs., C. J. Sperco & Son, Rotterdam; **Blue**, 35 bgs., Order, Hamburg; **Rape**, 50 bls., J. D. Nordlinger, Rotterdam; 200 bgs., C. J. Sperco & Son, Rotterdam; 100 bgs., Jules Lewis, Inc., Rotterdam; 200 bgs., C. J. Sperco & Son, Rotterdam; **Sugar Beet**, 330 bgs., Order, Bremerhaven; 1,960 bgs., American Express Co., Hamburg

SEED LAC—5 cs., Order, Calcutta

SEIGNETTE SALT—66 csks., W. Neuberg, Rotterdam

SHELLAC—5 cs., F. Henjes, Jr., Inc., Bremerhaven; 50 bgs., Order, Hamburg; 600 bgs., Order, Calcutta; 5 cs., F. Henjes, Jr., Hamburg; **Garnet**, 20 chests, Irving National Bank, Hamburg; 30 chests, Irving National Bank, Hamburg

SOAP—151 pkgs., A. Tsifakis, Constantinople; 369 bxs., A. Badjimankols, Constantinople; 100 bxs., Order, Leghorn; 3 cs., B. Altman & Co., Southampton; 18 cs., F. R. Arnold & Co., Southampton

SODIUM SALTS—Caustic, 1 cse., F. Henjes, Jr., Bremen; Chlorate, 24 cs., American Express Co., Hamburg; Cyanide, 140 cs., Lusskin

& Co., Havre; **Fluoride**, 33 bbls., Order, Hamburg; **Nitrate** (ref'd), 27 csks., Order, Hamburg; **Phosphate**, 113 cs., A. Klipstein & Co., Rotterdam; **Prussiate**, 49 csks., Kidder Peabody & Co., Rotterdam; 2 csks., Irving National Bank, Hamburg; **Sulfide**, 82 cs., C. F. Grant & Co., Bremerhaven; **Sulfite**, 180 bbls., Foreign Trade Supply Corp., Hamburg

SPICES—Cinnamon, Quills, 200 bls., American Exchange National Bank, Colombo; **Chillies**, 168 pkgs., Order, Bombay; **Ginger**, 1 bbl., Export Fish Co., Aguadella; 45 bgs., Colonial Bank of London, Kingston; 38 bgs., 4 bbls., Canadian Bank of Commerce, Kingston; 2,191 bgs., Order, Bombay; **Maize**, 3 bbls., Huth, Gillespie & Co., Grenada; 82 cs., J. H. Forbes Tea & Coffee Co., Rotterdam; 147 cs., Catz American Co., Rotterdam; 17 cs., Lunham & Moore, Rotterdam; **Mustard**, 26 csks., J. Wile Sons, Southampton; **Nutmegs**, 50 bgs., Catz American Co., Grenada; 18 bgs., Huth, Gillespie & Co., Grenada; 189 bgs., Royal Bank of Canada, Grenada; 20 bgs., F. B. Vandegrift & Co., Grenada; 12 bgs., J. Carrnana, London; 111 bgs., Van Loan & Co., London; 58 bgs., Order, London; **Pepper**, Black, 38 bgs., Order, Bombay; **Red**, 8 bgs., E. Levy, Constantinople

SULFUR—Precipitated, 2 cs., C. A. Sykes, London

SUMAC—Ground, 1,400 bgs., Order, Palermo

TALC—500 csks., Irving National Bank, Genoa; 200 csks., Relchard Coulston, Inc., Genoa; 600 csks., Lincoln Trust Co., Genoa; 300 bgs., Kountze Bros., Genoa; 50 csks., Order, Genoa; 5 csks., Kirchberger & Co., Bordeaux; 10 cs., Bunney Smith & Co., Bordeaux; 600 bgs., Hammill & Gillespie, Bordeaux; 1,800 bgs., L. A. Salomon & Bros., Bordeaux; 500 bgs., Whittaker Clark & Daniels, Bordeaux

TARTAR—41 cs., Tartar Chemical Co., Marseilles; **Cream**, 100 csks., W. Neuberg, Rotterdam; 2 csks., W. Neuberg, Rotterdam

THYMOL—5 cs., Order, Hamburg

WAX—Bees, 75 cs., Knauth, Nachod & Kuhne, Rotterdam; 50 bgs., Order, Havana; **Mountain**, 150 bgs., Strohmeier & Arpe Co., Hamburg; 275 bgs., Strohmeier & Arpe Co., Hamburg

ZINC SALTS—Chloride, 68 drs., Order, Hamburg; 12 csks., E. M. & F. Waldo, Antwerp; **Nickel**, 29 cs., L. C. Hirsch & Co., Hamburg; **Oxide**, 35 bbls., Order, Bremerhaven; 5 csks., Order, Hamburg

ZIRCONIA—463 bgs., Order, Hamburg

Books of Trade Interest

TEXTBOOK OF ORGANIC CHEMISTRY. A. F. Holleman, Ph.D., University of Amsterdam. Issued in English in Cooperation with Hermon C. Cooper, College of the City of New York. Sixth English Edition. 8 vo., 528 pages. John Wiley & Sons, New York, 1921.

This well known text is now in its sixth edition in English with a total issue of twenty-five thousand. The present edition departs from the others in minor details only. The subject of inorganic chemistry is presented from the standpoint of physical chemical theory and is intended as a text for advanced students and a reference work for the profession generally. The Textbook of Organic Chemistry by Dr. Holleman, translated by Walker and Mott, is a companion volume to the present inorganic text.

RAW SILK, A PRACTICAL HAND-BOOK FOR THE BUYER. By Leo Duran. Second revised edition, illustrated. About 200 pages. Published by the Silk Publishing Co., New York.

Mr. Duran tells the story of the production of raw silk in the Far East and in Italy, in simple language and covers the commercial history of the industry in

China, Japan, and other centers in such detail that a buyer knows the origin of the product he purchases, how it was made, and the markets where it was sold. The author knows his subject thoroughly, having traveled in all the silk producing countries and the reader feels that everything worth writing about the raw silk industry has been told, in this little volume. In addition to the text a list of the raw silk firms of the world is given.

A SYSTEMATIC QUALITATIVE CHEMICAL ANALYSIS. By Geo. W. Sears, Ph.D., University of Nevada. 8 vo., 119 pages. John Wiley & Sons, New York, 1921.

A textbook which is based on the idea that there is more to be taught in a course of qualitative analysis than the simple separation and identification of the elements and groups. Discussions of the theoretical considerations entering into each reaction are scattered throughout the book at the places where they are most needed so that the student is not compelled to look up references elsewhere. The law of mass action and the ionic theory are given especial prominence in the explanatory matter which is in all cases kept distinct from the procedures for the analysis.

CHICAGO STARCH COMPANY

NEW YORK, 2 Rector St.

Importers and Manufacturers

2710 So. Throop St., CHICAGO

UNIFORM DEXTRINES AND SPECIAL STARCHES

TAPIOCA FLOUR

SIZINGS

GUMS

POTATO STARCH

Wants & Offers

Rate—All classifications, \$1.00 an issue for 20 words or less, additional words, 5c each, per issue.

Payment—Must accompany order, add 10c if replies are to be forwarded.

Address "Wants & Offers"

DRUG & CHEMICAL MARKETS
3 Park Place, New York.

BUSINESS OPPORTUNITIES

MODERN Formaldehyde plant of large capacity, with rectifying installation for wood alcohol, splendidly located at export harbor, desires cooperation with producers of crude and pure methyl alcohol. Syntes, No. 1. (SWEDEN)

SAN FRANCISCO concern calling on entire Pacific coast trade desires connections with alkali concern interested in sale of their products in this territory. Box 72 DRUG & CHEMICAL MARKETS.

REPRESENTATION wanted—chemical, drug, pharmaceutical or allied lines. Domestic or Export. 27 years experience. J. H. A. Fink, 126 Liberty St., New York City.

FOREIGN connection or foreign accounts desired either as representative in America or as salesman travelling abroad. Well qualified to exercise any capacity through actual experience abroad. Japan and China preferred. Box 65, DRUG & CHEMICAL MARKETS.

BELGIAN DYES—American Sales Agent wanted for desirable line of dyes, importable under license. Connection sought only with a strictly American firm with an active sales organization in the textile industries. Box 94, DRUG & CHEMICAL MARKETS.

MANUFACTURERS of Carbon Black requiring representative in Great Britain communicate with Box 64, DRUG & CHEMICAL MARKETS.

SITUATIONS WANTED

OFFICE manager, 29, reliable, good chemical experience, looks for assured future, excellent references. Box 91, DRUG & CHEMICAL MARKETS.

The open door to opportunity is never closed—it stands invitingly open to the man who uses a "Wants & Offers" key.

State your needs clearly and concisely in "Wants & Offers." They are read by many who are alive to the opportunities that they contain.

Consult "Wants & Offers" every week, and if you don't find what you want, send a Want or Offer of your own.

SITUATIONS WANTED

CHEMICAL MAN
Office manager-executive, sales assistant, American (32) well educated; good personality, several years business experience, especially exporting, good common sense, available immediately; salary very moderate. Box 101, DRUG & CHEMICAL MARKETS.

CHEMIST, American, 40, whose experience has been analytical and commercial during the last 20 years, understands specifications, can meet men, has executive ability, would take an interest in a going concern. Will invest money, experience, and services. Box 86, DRUG & CHEMICAL MARKETS.

SITUATIONS WANTED

CHEMICAL Engineer—7 years experience in the manufacture of Intermediates, thoroughly understands the relationship between Intermediates and finished color, desires connection in sales capacity where this knowledge can be utilized to the fullest, Box 92, DRUG & CHEMICAL MARKETS.

CHEMIST, College graduate, with five years experience in Organic Research, the manufacture of dyestuffs and intermediates, also chlorine and bromine products, two years as plant superintendent, desires similar position with well established company. Have complete specifications for all products made. Box 84, DRUG & CHEMICAL MARKETS.

WANTED—Medicines, preparations or supplies for retail druggists by young man, 28, of good education and varied commercial experience. Box 97, DRUG & CHEMICAL MARKETS.

CHEMICAL Engineer, graduate (24) one year plant and office experience. Box 93, DRUG & CHEMICAL MARKETS.

HELP WANTED

REPRESENTATIVES WANTED in the following cities by a manufacturer of "Quality" Drugs: Chicago, St. Louis, New Orleans, Atlanta, Chattanooga, Montreal-Canada, Kansas City, Memphis. Box 100, DRUG & CHEMICAL MARKETS.

A CHEMIST with actual plant experience, capable of taking charge of production on Methyl Violet and other basic dyes—a steady position for a progressive man. Box 99, DRUG & CHEMICAL MARKETS.

CONTINUED ON FOLLOWING PAGE

A Dye Line 40 Years Long

One of the first to realize the natural geographic advantages of Newark for manufacturing purposes was the Central Dyestuff & Chemical Co., which undertook the manufacture of an extensive line of dyestuffs back in 1898. The company makes most of the intermediates entering into the manufacture of its Acid, Basic, Chrome and Direct Colors.

Removed but a short distance from the Central plant is that of the Consolidated Color and Chemical Co. The colors made by them are augmentative to those of the Central line, including many of the important Sulphur group, so the result of these two is a complete and well-balanced line of Acid, Basic, Chrome, Direct and Sulphur Colors, as well as nigrosines, oil colors, wood stains, turkey red oils and the like.

In conjunction with these the Consolidated Color & Chemical Co. also produces a line of sizing, softening, bleaching and finishing materials, known to the trade as the "VICTORIA" products.

The products of the two companies are distributed through the sales organization of H. A. Metz & Co., Inc., having its principal office at 122 Hudson Street, New York, with branches in Boston, Providence, Chicago, Philadelphia, Charlotte and San Francisco.

In addition to these Made-in-America products we will procure for you on import licenses colors not as yet made here in sufficient quantity or of suitable quality or at reasonable prices.

This alignment of manufacturing facilities enhanced by access to goods not available here, administered by men whose equipment includes an experience of more than forty years, must appeal to all consumers of dyestuffs.



Registered
U. S. Patent
Office

H.A. METZ & CO. Inc.

One-Twenty-Two Hudson Street, New York City.

Boston Philadelphia Providence
Chicago Charlotte San Francisco

Wants and Offers—The Marketplace of the - - Drug and Chemical Industries

HELP WANTED

WANTED—Salesman to handle intermediates for the dyestuff trade, one who is familiar with this line. Excellent opportunity for right party. Address Box 85, DRUG & CHEMICAL MARKETS, stating age, experience, and salary expected.

SALESMAN must be well connected among large users of imported pigments and chemicals in the paint, varnish, linoleum and rubber industries, must have clean and considerable sales record. Box 71 DRUG & CHEMICAL MARKETS.

CHEMIST wanted, who has had experience in manufacture of sealing wax. Opportunity for man who knows business and willing worker. Box 67, DRUG & CHEMICAL MARKETS.

DRUGS AND CHEMICALS

SALESMAN, industrial chemicals, desires connection with importers or manufacturers, acquainted with paper, leather, rubber, textile manufacturers in New York, Jersey, and Pennsylvania. Employed. Box 95, DRUG & CHEMICAL MARKETS.

FOR SALE 5 kilo tin Essence Mandarin at \$4.00 per pound. Thac Industrial Products Co., Trenton, N. J.

DRUGS & CHEMICALS

ODD Lots wanted—Government surplus sales and job lots fine chemicals, pharmaceuticals and druggists sundries—Cash. Also for sale—half manufacturers prices. Request lists. Box 1374, Detroit, Mich.

OFFER at advantageous prices Tannic Acid, U.S.P., kegs, cartons; Disodium Phosphate U.S.P., barrels; Gum Tragacanth Flake and No. 3. Box 96, DRUG & CHEMICAL MARKETS.

WILL make to your order vacuum concentration of any Californian fruit juices. Specimens on request. W. J. Bush Citrus Products, National City, Cal.

WANTED supplies of Victoria Blue Base, lowest price and small sample to Box 83, DRUG & CHEMICAL MARKETS.

WANTED—Calcium Silicide and Calcium Hydride, five hundred pounds, monthly contract. Box 73 DRUG & CHEMICAL MARKETS.

CONCENTRATED Apple Cider approximately 32 beaume, offer same at less than half present market. Danciger Brothers, Kansas City, Mo.

OFFER Stillingia and Serpentaria for regular future delivery. Prices and samples on request. Natural Products Co., Forestburg, Texas.

WANT to buy leaf Gelatin. Samples and c.i.f. prices required. Shima Trading Co., Ltd., Osaka, Japan.

TO Offer for immediate sale on account of lack of storage space—110 tons of calcined magnesite. Box 62, DRUG & CHEMICAL MARKETS.

WHO is interested in supply of Quinoline, high grade, low price? Address Box 4, DRUG & CHEMICAL MARKETS.

PLANT EQUIPMENT

WANTED—One 1,500 to 1,600 gallon jacketed nitrator. Give all details and condition. Box 89, DRUG & CHEMICAL MARKETS.

WANTED—Drums, second-hand, good condition only, give full details and price first letter. Box 74 DRUG & CHEMICAL MARKETS.

FOR SALE—Centrifugals, steam and electric driven, 36 to 48 inches. American and Tolhurst—attractive prices for immediate sale. Box 76 DRUG & CHEMICAL MARKETS.

WANTED—One 1,700 gallon Buffalo Reducer. Give all details and condition. Box 90, DRUG & CHEMICAL MARKETS.

STEEL TANKS

1500

New and slightly used steel tanks in all sizes and kinds. Pressure tanks, mixing tanks, storage tanks, pump tanks, heating tanks, etc. Write for Bulletin No. 7, giving sizes and descriptions.

NASHVILLE INDUSTRIAL CORP.
Jacksonville, Tennessee

Naphthalene

Pacific Chemical Co.

70 Cliff St., N. Y.

Beekman 8257

Merchants Chem. Co.

Incorporated

7 So. Dearborn St., Chicago

Milwaukee

Minneapolis



High Grade

Chemicals

Naphthalene Flakes
Bicarbonate of Potash U.S.P.
Carbonate of Potash

All Grades

Potash Alum Lump U.S.P.
Beta Naphthol
Caustic Potash

GEO F. TAYLOR CO., Inc.

Established 1873

45 William Street

New York

Buyers' Guide

For full particulars as to products and addresses see Index of Advertisers on the page following.

HEAVY CHEMICALS

Battelle & Renwick	Litter & Allen
Butterworth Judson Corp.	Merchants Chemical Co.
Church & Dwight	Meteor Products Co.
The Cleveland-Cliffs Iron Co.	Mathieson Alkali Works
Commercial Solvents Corp.	The Miner-Edgar Co.
Contact Process Co.	Nichols Copper Co.
Chas. Cooper & Co.	Pacific Chemical Co.
The Dow Chemical Co.	Pfaltz & Bauer
E. I. du Pont de Nemours & Co.	Protexol Corp.
Ellis Jackson & Co.	Roessler & Hasslacher Chem.
B. G. Feinberg	Semet Solvay Co.
General Chemical Co.	Solvay Process Co.
Goldsmith Bros. Sm. & Refg. Co.	Stein Hall & Co.
Grasselli Chemical Co.	George F. Taylor Co.
Wm. S. Gray & Co.	U. S. Industrial Alcohol Co.
R. W. Greeff & Co.	Victor Chemical Works
Innis Speiden & Co.	The Warner Chemical Co.
Wm. E. Jordan & Co.	Wilkes-Martin-Wilkes Co.
A. Klipstein & Co.	Jacques Wolf & Co.

FINE CHEMICALS

Abbott Laboratories	Litter & Allen
Baird & McGuire	Magnus, Mabée & Reynard, Inc.
Chicago Starch Co.	Mallinckrodt Chemical Works
Antoine Chiris Co.	May & Baker
Commercial Solvents Corp.	Metz & Co.
Commonwealth Chemical Corp.	Meteor Products Co.
Charles Cooper & Co.	H. A. Metz & Co.
The Dow Chemical Co.	The Miner-Edgar Co.
Eastman Kodak Co.	Monsanto Chemical Works
B. G. Feinberg	N. Y. Quinine & Chemical Wks.
E. Fougere & Co.	Pacific Chemical Co.
T. Fujisawa & Co.	Pfaltz & Bauer
Grasselli Chemical Co.	Powers-Weightman-Rosengarten
William S. Gray & Co.	Roessler & Hasslacher Chemical Co.
R. W. Greeff & Co.	Stein Hall & Co.
A. H. Higbie	U. S. Industrial Chemical Co.
A. Klipstein & Co.	Victor Chemical Works
Jose Lopez	Wilkes-Martin-Wilkes Co.

DYESTUFFS

Butterworth-Judson Corp.	H. A. Metz & Co.
Calco Chemical Co.	National Aniline & Chemical Co.
Chemical Co. of America	New Brunswick Chem. Co.
Dow Chemical Co.	Newport Chemical Works
Essex Aniline Works	Sanborn Chemical Works
E. I. du Pont de Nemours & Co.	Stein Hall & Co.
Ellis Jackson & Co.	George F. Taylor Co.
Grasselli Chemical Co.	Jacques Wolf & Co.
A. Klipstein & Co.	

COAL TAR PRODUCTS

Abbott Laboratories	Jordan Coal Tar Products Co.
Baird & McGuire	H. A. Metz & Company
The Barrett Co.	Monsanto Chemical Works
Butterworth-Judson Corp.	National Aniline & Chemical Co.
Calco Chemical Co.	Newport Chemical Works
Chatfield Mfg. Co.	Pacific Chemical Co.
Chemical Company of America	Protexol Corp.
Commonwealth Chemical Corp.	Sanborn Chemical Works
Essex Aniline Works	The Walker Chemical Co.
E. I. du Pont de Nemours & Co.	

FATTY OILS

Antoine Chiris Co.	National Oil Products Co.
A. Klipstein & Co.	George F. Taylor Co.
New Brunswick Chem. Co.	Jacques Wolf & Co.

ESSENTIAL OILS

M. L. Barrett & Co.	Magnus, Mabée & Reynard, Inc.
W. J. Bush & Co.	Morana, Incorporated
Antoine Chiris Co.	Van Dyk & Co.
Fritzsch Bros.	

CRUDE DRUGS

M. L. Barrett & Co.	A. H. Higbie
W. J. Bush & Co.	Jose Lopez
Walter Denman	Magnus, Mabée & Reynard, Inc.
E. Fougere & Co.	Morana, Incorporated
	Pfaltz & Bauer

EQUIPMENT

P. Blakiston's Son & Co.	Nashville Industrial Corp.
Buffalo Foundry & Machine Co.	The Revue de Produits Chimique
The Chemical Age	The Yakugyo Shuho
Chemical Trade Journal	

THE NEWPORT QUALITY

Coal Tar Products

We have stocks of the following products at Passaic, N. J., ready for immediate shipment:

Alpha Naphthylamine

Ortho Nitro Toluol

Ortho Toluidine

Para Toluidine

Sodium Naphthionate

H-Acid

N W Acid

R Salt

Cleves Acid

Guaiacol

Para Nitro Toluol



REG. U.S. PAT. OFF.
"COAL TO DYESTUFF"

Newport Chemical Works, Inc.

Passaic, New Jersey



A BINDER
FOR THIS JOURNAL

Save Your Copies

Price \$1.00 net Cash, postpaid

Solvents
Absolute Alcohols
Higher Alcohols
Esters
Alcohol Products
Ether

Ethylene
Iodine (Distilled)
Iodine Products
Carbon Dioxide
Potash Salts
Ammonium Salts

Sales Offices:

BALTIMORE,
 South Baltimore

BOSTON,
 943 Cambridge Street

CHICAGO,
 First National Bank Bldg.

DETROIT,
 Union Trust Building

NEW ORLEANS,
 1008 Maison Blanche Building

NEW YORK,
 27 William Street



U. S. Industrial Chemical Co.

ALCOHOL

PURE and DENATURED

FOR

**MANUFACTURING, INDUSTRIAL, SCIENTIFIC,
 AND TECHNICAL PURPOSES**

U. S. Industrial Alcohol Co.

Executive Offices:
 27 William Street, New York

Branch Sales Offices and Distributing Warehouses

NEW YORK	James A. Webb & Son, Inc., 50-52 Stone Street
BALTIMORE	A. L. Webb & Sons, Inc., 201 Maryland Trust Building
PHILADELPHIA	Pennsylvania Alcohol & Chemical Co., 141 North Front Street
BOSTON	U. S. Industrial Alcohol Co., 943 Cambridge St., E. Cambridge, Mass.
BUFFALO	U. S. Industrial Alcohol Co., 4th and Pennsylvania Streets
CHICAGO	U. S. Industrial Alcohol Co., First National Bank Building
ST. LOUIS	U. S. Industrial Alcohol Co., 1434 North Broadway
KANSAS CITY	U. S. Industrial Alcohol Co., 1409 West 10th Street
NEW ORLEANS	U. S. Industrial Alcohol Co., 1008 Maison Blanche Building
PITTSBURGH	U. S. Industrial Alcohol Co., 601 Empire Building
CLEVELAND	U. S. Industrial Alcohol Co., 374 Kirby Building
DETROIT	U. S. Industrial Alcohol Co., 616 Union Trust Building
INDIANAPOLIS	U. S. Industrial Alcohol Co., 129 North Davidson Street
CINCINNATI	U. S. Industrial Alcohol Co., Evans St. and C. H. D. R. R. Crossing
PEORIA	U. S. Industrial Alcohol Co.

Index To Advertisers

Abbott Laboratories	4th cover
Baird & McGuire	759
M. L. Barrett Co.	765
The Barrett Co.	726
Battelle & Renwick	736
P. Blakiston's Son & Co.	—
Buffalo Foundry & Machine Co.	—
W. J. Bush & Co.	4th cover
Butterworth-Judson Corp.	760
Culco Chemical Co.	724
The Chatfield Mfg. Co.	715
The Chemical Age	—
Chemical Co. of America	760
Chemical Trade Journal	—
Chicago Starch Co.	770
Antoine Chlris Co.	766
Church & Dwight	775
The Cleveland-Cliffs Iron Co.	757
Commercial Solvents Corp.	753
Commonwealth Chemical Corp.	764
Contact Process Co.	775
Charles Cooper & Co.	711
The Dow Chemical Co.	763
E. I. du Pont de Nemours & Co., Dyestuffs Department	723
Acids & Heavy Chemicals Div.	735
Intermediates Department	758
Eastman Kodak Co.	764
Ellis Jackson & Co.	—
Essex Aniline Works	759
R. G. Feinberg	766
E. Fougera & Co.	751
Fritzsche Bros.	767
F. Fujisawa & Co.	766
General Chemical Co.	725
Goldsmith Bros. Smelting & Refining Co.	775
Grasselli Chemical Co.	752
Dyestuffs Dept.	—
William S. Gray & Co.	4th cover
R. W. Greeff & Co.	753
A. H. Higbie	—
Innis Speiden & Co.	754
Jordan Coal Tar Products Co.	—
William E. Jordan	759
A. Klipstein & Co.	754
La Revue des Produits Chimiques	765
Litter and Allen	—
Jose Lopez	764
Magnus, Mabce & Reynard, Inc.	—
Mallinckrodt Chemical Works	4th cover
Mathieson Alkali Works	—
May & Baker	766
Merchants Chemical Co.	772
Merck & Co.	—
Meteor Products Co.	—
H. A. Metz & Co.	771
The Miner-Edgar Co.	752
Monsanto Chemical Works	1st cover
Morana, Incorporated	767
Nashville Industrial Corp.	772
National Aniline & Chemical Co.	4th cover
National Oil Products Co.	761
New Brunswick Chemical Co.	761
Newport Chemical Works	773
New York Quinine & Chemical Works	765
Nichols Copper Co.	762
Pacific Chemical Co.	772
Pfaltz & Bauer	—
Powers-Weighman-Rosengarten Co.	761
Protexol Corp.	760
The Roessler & Hasslacher Chem. Co.	—
Samson Rosenblatt	775
Sanborn Chemical Works	759
Semet-Solvay Co.	—
Solvay Process Co.	762
Stein Hall & Co.	2nd cover
George F. Taylor Co.	772
U. S. Industrial Chemical Co.	774
U. S. Industrial Alcohol Co.	774
The Warner Chemical Co.	755
The Walker Chemical Co.	758
Van Dyk & Co.	766
Victor Chemical Works	756
Wilckes-Martin-Wilckes Co.	751
Wing & Evans	752
Jacques Wolf & Co.	—
The Yakugo Shuho	763

CHURCH & DWIGHT CO.

80 Maiden Lane
New York

Bicarbonate of Soda
Sal Soda
Monohydrate of Soda

NAPHTHALENE

Ball - Flake - Crystals

The Chatfield Manufacturing Co.

Cincinnati, Ohio, U. S. A.

New York Stock:

ROCKHILL & VIETOR 22 Cliff Street, New York
Phone—Beekman 1972

Chicago Stock: ROCKHILL & VIETOR
Phone, Franklin 4941-2-3 180 N. Market St., Chicago, Ill.

We Offer

GLYCERINE C. P.

Cudahy Make, 50 lb. Cans

at 14 $\frac{3}{4}$ Cents per lb.

F. O. B. PHILADELPHIA

SAMSON ROSENBLATT

CHEMICALS, DRUGS AND SPECIALTIES

Export, Import, Commission

65 FULTON STREET

NEW YORK

Telephones, Beekman 6520, 6521, 6522, 6523

GOLDSMITH BROS. SMELTING & REFINING CO.

CHICAGO, ILLINOIS

Manufacturers of

COPPER SULPHATE

(BLUE VITRIOL)

Powdered 200 Mesh
Large or small crystals

ACIDS

Muriatic Mixed
Sulphuric

CONTACT PROCESS CO.

BUFFALO, N. Y.

SUGAR COLORING

"2 STARS"

Unequalled for Strength and Brilliancy
Will not Deposit

W. J. BUSH & CO., Inc.,
370 7th AVE., NEW YORK, N. Y.

**Citric Acid
Phosphoric Acid
Sodium Benzoate**

Inquiries Solicited

Mallinckrodt Chemical Works
St. Louis—Montreal—Philadelphia—New York



NATIONAL

Naphthol A S

RAPID FAST DYES FOR COTTON
WHEN
DIAZOTIZED AND DEVELOPED
WITH

National Red Developer P
National Blue Developer D
National Scarlet Developer O

NATIONAL ANILINE & CHEMICAL COMPANY, INC.
New York Office: 21 Burling Slip

**Podophyllin**

U. S. P.

SYNTHETIC CHEMICALS-ALKALOIDS
EXTRACTS

Write for Prices
The Abbott Laboratories
4739-53 RAVENSWOOD AVENUE
CHICAGO ILL.

WM. S. GRAY & CO.

342 MADISON AVE.

New York City

**MAGNESIA
WHITING**

